

AGRICULTURE

POLICY

Transform Punjab's agriculture into a market-driven, diversified and sustainable sector through integrated technologies, transparency and value-for-money.

OBJECTIVES

- Increase food production to improve food quantity, quality and nutrition diversity through higher yields and better crop mix.
- Increase farmer's profitability to raise living standards of the farming families with increased participation of rural women and youth.
- Conserve agricultural resources with efficient use of land, water and labor deployed for agriculture.
- Enhance sustainability and resilience in the wake of climate changes and implications thereof.
- Enable private sector participation in agriculture value chains with increased investment, technology infusion and management resources.
- Enhance competitive position of agriculture sector in line with global and domestic market demands, including to get benefit from China Pakistan Economic Corridor (CPEC) opportunities.
- Paradigm shift from traditional to precision Agriculture.
- Increased diversification and value addition through investment in high value agriculture.
- Shift from Implementer to regulator and enable private sector by amending marketing law and seed Act.
- Revamping research and extension services to meet new challenges of productivity and food quality.
- Improve farm efficiency through High tech farm mechanization and water conservation technologies (DRIP irrigation, water course lining, laser land leveling, etc.).

STRATEGIC INTERVENTIONS

- Expansion in agriculture produce markets.
- Improve access and quality of agriculture inputs.
- Encourage change in crop mix.
- Move towards climate smart and regenerative agriculture.
- Climate smart investments.
- Emphasis on horticulture, cotton and high value agriculture.
- Development of value chain and establishment of food certification mechanism.
- Enhancing crop productivity through adoption of new technologies.
- Enhancement of fruit & vegetable production and productivity.
- Efficient use of water by way of precision land leveling and economical use of available water through high efficiency (drip/sprinkler) irrigation systems.
- Decrease in oil seeds import bills through boosting local production.
- Diversification of high value cropping through promotion of horticulture.
- Commissioned research for development of cotton seed.
- Development of efficient marketing infrastructure.
- Strengthening of triangle linkages among farmer-research & extension.

ACHIEVEMENTS DURING FY 2018-19

#	COMPONENTS	ACHIEVEMENTS
1	Improvement of un-Improved Watercourses (No.)	43
2	Improvement of Partially Improved/ Additional Lining of Watercourses (No.)	459
3	Rehabilitation of Irrigation Schemes in Non-Canal Command Areas (No.)	263
4	Installation of High Efficiency Irrigation Systems (Acres)	10,000
5	Construction of Water Storage Ponds (No.)	131
6	Extension in Lining of Watercourses (No.)	273
7	Installation of Solar Systems on HEIS sites (Acres)	4,500
8	Installation of Tunnels on HEIS sites (Acres)	1,003
9	Installation of Sprinkler System (acres)	140
10	Horizontal Land Development (Acres)	25160
11	Tube well Bores Developed Through Power Drilling Rigs (Nos.)	76
12	Gully Plugging Spill ways (Nos.)	59
13	Water Disposal Outlets (Nos.)	50
14	Ponds (Nos.)	30
15	Provision of certified Seed (Rice, Wheat, Maize, Fodders, Vegetables etc) (KGs)	318,149

16	Demonstration of technology of Integrated Management of Pink Bollworm (Acres)	2,700
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TARGETS DURING FY 2019-20

#	COMPONENTS	TARGETS
1	Improvement of unimproved watercourses upto 50 % (Nos.)	350
2	Additional lining of already improved watercourses upto 50% (Nos.)	1300
3	Installation of high efficiency irrigation systems (HEIS) (acres)	10,000
4	Plantation of olive plants on farmer fields(Acres)	2,500
5	Award of small matching grants on farmer fields (Acres)	75,000
6	Provision of implements for enhancement of wheat productivity (No.)	1545
7	Provision of implements for enhancement of rice productivity (No.)	580
8	Provision of implements for enhancement of sugarcane productivity (No.)	717
9	Oil Seed Area enhancement (Acres)	80,636
10	Provision of laser land leveling units(No.)	1750

NEW INITIATIVES

1. National program for improvement of watercourses in Pakistan Phase-II (Cost Rs.18,333 M)
2. National Oil Seed enhancement program. (Cost Rs.3,069 M)
3. National Program for Enhancing Profitability Through Increasing Productivity Of Wheat (Cost Rs.9,137 M)
4. National Program for Enhancing Profitability through Increasing Productivity of Rice (Cost Rs.4,633 M)
5. National Program for Productivity Enhancement of Sugarcane. (Cost Rs.1,738 M)
6. National Program for Enhancing Command Area of Small and Mini Dams in Barani Areas of Pakistan (Cost Rs.1,593 M)
7. Strengthen of Well Drilling Services Through Procurement of Power Drilling Rigs (Cost Rs.600 M)
8. Program for Establishment of Model Markets in Punjab (Cost Rs.21,375 M)
9. Provision of Missing Infrastructure in 10 Agriculture Produce Markets. (Under PPP Mode) (Cost Rs.200 M)
10. Revamping of floriculture activities in Punjab. (Cost Rs.400 M)
11. Enhancement of honey production by using modern techniques. (Cost Rs.50 M)

12. Research and Promotion of medicinal plants in Punjab. (Cost Rs.100 M)
13. Enhancing productivity in 10 low producing tehsils through deployment of fresh Agri Scientists at farm level. (Cost Rs.200 M)
14. Rehabilitation of eroded, gullied land through soil conservation measures in hill torrents / barani areas of southern Punjab (Cost Rs.300 M)

AGRICULTURE: SUMMARY

(PKR Million)

Type / Sub Sector	No. of Schemes	Provision for 2019-20				Projection for 2020-21	Projection for 2021-22
		Capital	Revenue	Foreign Aid	G. Total (Cap + Rev)		
<u>ON-GOING SCHEMES</u>							
Agriculture Education	4	0.000	1,150.131	0.000	1,150.131	469.221	0.000
Agriculture Extension	1	0.000	500.000	0.000	500.000	1,911.364	0.000
Agriculture Research	10	363.171	363.085	0.000	726.256	1,101.615	50.085
Economics & Marketing	1	0.000	321.000	0.000	321.000	777.000	690.107
Soil Survey of Punjab	1	0.000	70.000	0.000	70.000	45.000	0.000
Water Management	2	0.000	676.527	3,500.000	4,176.527	10,626.395	0.000
Total: ON-GOING SCHEMES	19	363.171	3,080.743	3,500.000	6,943.914	14,930.595	740.192
<u>NEW SCHEMES</u>							
Agriculture Education	1	0.000	90.000	0.000	90.000	80.000	0.000
Agriculture Extension	5	25.000	435.000	0.000	460.000	610.000	280.000
Agriculture Mechanization	3	0.000	901.000	0.000	901.000	1,999.000	0.000
Agriculture Research	5	108.000	112.000	0.000	220.000	330.000	60.000
Economics & Marketing	1	0.000	100.000	0.000	100.000	100.000	0.000
Floriculture	1	0.000	100.000	0.000	100.000	200.000	100.000
PM's Package	8	0.000	6,072.086	1.000	6,073.086	6,553.648	9,642.856
Water Management	3	0.000	611.000	0.000	611.000	1,140.000	900.000
Total: NEW SCHEMES	27	133.000	8,421.086	1.000	8,555.086	11,012.648	10,982.856
<u>PPP PROJECT</u>							
PPP	1	0.000	1.000	0.000	1.000	0.000	0.000
Total: PPP PROJECT	1	0.000	1.000	0.000	1.000	0.000	0.000
Grand Total	47	496.171	11,502.829	3,501.000	15,500.000	25,943.243	11,723.048

Agriculture

(PKR Million)

GS No	Scheme Information Scheme ID / Approval Date / Location	Est. Cost	Accum. Exp. June, 19	Provision for 2019-20			MTDF Projections		Throw fwd Beyond June, 2022
				Cap.	Rev.	G.Total (Cap.+Rev.)	2020-21	2021-22	
1	2	3	4	5	6	7	8	9	10

ON-GOING SCHEMES

Agriculture Education

4821	Establishment of Sub Campus of PMAS Arid Agriculture University Rawalpindi Attock 01261603578 / 25-01-2017 / Attock	879.668	210.447	0.000	200.000	200.000	469.221	0.000	0.000
4822	Scheme for 50 overseas Ph.D. scholarships for University of Agriculture, Faisalabad. 01091501001 / 01-07-2015 / Faisalabad	656.083	378.882	0.000	250.000	250.000	0.000	0.000	0.000
4823	Establishment of Punjab Bio-Energy Institute (PBI) at UAF 01091400893 / 01-08-2014 / Faisalabad	770.473	635.976	0.000	100.131	100.131	0.000	0.000	0.000
4824	Establishment of Muhammad Nawaz Shareef University of Agriculture, Multan (Phase II). 01241501276 / 01-07-2015 / Multan	1,791.233	1,191.233	0.000	600.000	600.000	0.000	0.000	0.000
Total: Agriculture Education		4,097.457	2,416.538	0.000	1,150.131	1,150.131	469.221	0.000	0.000

Agriculture Extension

4825	Extension Service 2.0 farmer facilitation through modernized extension. 01371500997 / 11-08-2015 / Punjab	4,104.739	1,693.375	0.000	500.000	500.000	1,911.364	0.000	0.000
Total: Agriculture Extension		4,104.739	1,693.375	0.000	500.000	500.000	1,911.364	0.000	0.000

Agriculture Research

4826	Introduction and adaptation of high value crops and fruits in climatic conditions of Punjab (SMART, DLI-2,4b). 01271500990 / 01-07-2016 / Chakwal	34.565	30.555	0.000	3.467	3.467	0.000	0.000	0.000
4827	Upgradation of AARI Infrastructure, Faisalabad (SMART, DLI-2) 01091700078 / 01-07-2017 / Faisalabad	297.779	91.178	206.602	0.000	206.602	0.000	0.000	0.000
4828	Improvement of Production technology in garlic and ginger (SMART, DLI-2,4b) 01091603574 / 09-12-2016 / Faisalabad	78.863	38.876	11.000	7.333	18.333	21.654	0.000	0.000
4829	Provision of lab and field equipment for development of Basmati rice hybrid resistant to Bacterial Leaf Blight, flood and salinity in Punjab (SMART, DLI-2) 01211500993 / 01-07-2016 / Sheikhpura	44.010	34.271	0.000	5.655	5.655	0.000	0.000	0.000
4830	Diversification to high value cropping through promotion of horticulture (SMART, DLI-2,4b). 01371601894 / 01-07-2016 / Punjab	50.000	30.350	0.000	10.000	10.000	9.650	0.000	0.000
4831	Construction of separate washrooms for female staff 01371703905 / 01-07-2017 / Punjab	51.635	0.945	50.000	0.000	50.000	0.000	0.000	0.000
4832	Developing Pothwar into an olive valley (SMART, DLI-2,4b) 01381500994 / 01-07-2015 / Attock,Chakwal,Jhelum,Khushab,Rawalpindi	1,672.445	642.337	0.000	233.000	233.000	797.108	0.000	0.000

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				Cap.	Rev.	G.Total (Cap.+Rev.)	2020-21	2021-22	
1	2	3	4	5	6	7	8	9	10
4833	Provision of additional research facilities for development of heat resilient maize hybrids at Maize & Millet Research institute (SMART, DLI-2,11) 01381500995 / 01-07-2015 / Faisalabad,Sahiwal	48.000	39.777	0.000	3.630	3.630	0.000	0.000	0.000
4834	Commissioned Research for development of Cotton Seed. (SMART, DLI-2) 01381601895 / 01-07-2016 / Faisalabad,Multan,Rahim Yar Khan	350.089	109.014	55.569	40.000	95.569	145.502	0.000	0.000
4835	Establishment of Centre of Excellence for olive Research and Training (CEFORT) at Barani Agriculture Research Institute Chakwal 01381800097 / 07-04-2019 / Attock,Chakwal,Jhelum,Khushab,Mianwali,Rawalpindi	277.786	0.000	40.000	60.000	100.000	127.701	50.085	0.000
Total: Agriculture Research		2,905.172	1,017.303	363.171	363.085	726.256	1,101.615	50.085	0.000
Economics & Marketing									
4836	Establishment of model farms linked with improved supply chain and value addition (SMART, DLI-4b) 01371603570 / 01-07-2016 / Punjab	2,180.343	392.236	0.000	321.000	321.000	777.000	690.107	0.000
Total: Economics & Marketing		2,180.343	392.236	0.000	321.000	321.000	777.000	690.107	0.000
Soil Survey of Punjab									
4837	Identification of dominant soil series in Punjab, capacity building through soil surveys and their mineralogical components 01371800212 / 20-03-2019 / Punjab	115.000	0.000	0.000	70.000	70.000	45.000	0.000	0.000
Total: Soil Survey of Punjab		115.000	0.000	0.000	70.000	70.000	45.000	0.000	0.000
Water Management									
4838	Punjab irrigated agriculture productivity improvement project (PIPIP) World Bank assisted 01371200003 / 01-07-2013 / Punjab	41,737.955	26,980.091	0.000	4,131.469	4,131.469	10,626.395	0.000	0.000
				Local:	0.000	631.469			
				Foreign:	0.000	3,500.000			
4839	Optimizing watercourse conveyance efficiency through enhancing lining length (SMART, DLI-11) 01371500999 / 01-07-2015 / Punjab	6,829.695	3,462.458	0.000	45.058	45.058	0.000	0.000	0.000
Total: Water Management		48,567.650	30,442.549	0.000	4,176.527	4,176.527	10,626.395	0.000	0.000
Total: ON-GOING SCHEMES		61,970.361	35,962.001	363.171	6,580.743	6,943.914	14,930.595	740.192	0.000
NEW SCHEMES									
Agriculture Education									
4840	Provision of fresh Irrigation Water and other basic infrastructure at Jalalpur Pirwala Research Farm of MNSUA Multan(SMART, DLI-11) 01241900971 / Un-Approved / Multan	170.000	0.000	0.000	90.000	90.000	80.000	0.000	0.000
Total: Agriculture Education		170.000	0.000	0.000	90.000	90.000	80.000	0.000	0.000

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1	2	3	4	5	6	7	8	9	10

Agriculture Extension

4841	Crop Maximization through Cooperative farming 01371900966 / Un-Approved / Punjab	400.000	0.000	0.000	200.000	200.000	200.000	0.000	0.000
4842	Promotion of fruits production in Punjab through provision of certified plants 01371900967 / Un-Approved / Punjab	500.000	0.000	25.000	75.000	100.000	200.000	200.000	0.000
4843	Research and Promotion of medicinal plants in Punjab.(SMART, DLI-2,4b) 01371900968 / Un-Approved / Punjab	100.000	0.000	0.000	40.000	40.000	30.000	30.000	0.000
4844	Enhancing productivity in 10 low producing tehsils through deployment of fresh agri scientists at farm level (Pilot Project) 01371902281 / Un-Approved / Punjab	200.000	0.000	0.000	70.000	70.000	130.000	0.000	0.000
4845	Provision of Agri. Credit Smart Cards to farmers for direct transfer of farm subsidies 01371902430 / Un-Approved / Punjab	150.000	0.000	0.000	50.000	50.000	50.000	50.000	0.000
Total: Agriculture Extension		1,350.000	0.000	25.000	435.000	460.000	610.000	280.000	0.000

Agriculture Mechanization

4846	Horizontal Land Development in South Punjab 01041900955 / Un-Approved / Dera Ghazi Khan	2,000.000	0.000	0.000	800.000	800.000	1,200.000	0.000	0.000
4847	Strengthening of Well Drilling Services Through Procurement of Power Drilling Rigs 01371900944 / Un-Approved / Punjab	600.000	0.000	0.000	1.000	1.000	599.000	0.000	0.000
4848	Rehabilitation of eroded, gullied land through soil conservation measures in hill torrents / barani areas of southern Punjab. 01381900956 / Un-Approved / Dera Ghazi Khan, Khushab, Layyah, Rajanpur, Rawalpindi	300.000	0.000	0.000	100.000	100.000	200.000	0.000	0.000
Total: Agriculture Mechanization		2,900.000	0.000	0.000	901.000	901.000	1,999.000	0.000	0.000

Agriculture Research

4849	Establishment of satellite center of BARI in Dera Ghazi Khan (SMART, DLI-2) 01041902431 / Un-Approved / Dera Ghazi Khan	50.000	0.000	0.000	20.000	20.000	30.000	0.000	0.000
4850	Strengthening of Cotton Research in Southern Punjab through Establishment of Cotton Research Sub-Station, Rajanpur (SMART, DLI-2) 01071900890 / Un-Approved / Rajanpur	200.000	0.000	90.000	10.000	100.000	100.000	0.000	0.000
4851	Establishment of tissue culture lab at HRS and provision of missing facilities at RARI Bahawalpur (SMART, DLI-2) 01021900929 / Un-Approved / Bahawalpur	60.000	0.000	18.000	12.000	30.000	30.000	0.000	0.000

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1	2	3	4	5	6	7	8	9	10
4852	Development of hybrid and OPVs in vegetables resilient to climate change (SMART, DLI-2,11) 01381900887 / Un-Approved / Layyah,Sahiwal	250.000	0.000	0.000	50.000	50.000	150.000	50.000	0.000
4853	Enhancement of honey production by using modern techniques (SMART, DLI-2) 01381900930 / Un-Approved / Dera Ghazi Khan,Faisalabad	50.000	0.000	0.000	20.000	20.000	20.000	10.000	0.000
Total: Agriculture Research		610.000	0.000	108.000	112.000	220.000	330.000	60.000	0.000
Economics & Marketing									
4854	Provision of Missing Infrastructure in 10 Agriculture Produce Markets. 01371900960 / Un-Approved / Punjab	200.000	0.000	0.000	100.000	100.000	100.000	0.000	0.000
Total: Economics & Marketing		200.000	0.000	0.000	100.000	100.000	100.000	0.000	0.000
Floriculture									
4855	Revamping of floriculture activities in Punjab (SMART, DLI-4b) 01371900972 / Un-Approved / Punjab	400.000	0.000	0.000	100.000	100.000	200.000	100.000	0.000
Total: Floriculture		400.000	0.000	0.000	100.000	100.000	200.000	100.000	0.000
PM's Package									
4856	National program for improvement of watercourses in Pakistan Phase-II (SMART, DLI-11) 01371900394 / 01-07-2019 / Punjab	18,333.054	0.000	0.000	1,651.389	1,651.389	2,283.259	4,937.549	9,460.857
4857	National Oil Seed enhancement program (SMART, DLI-4b) 01371900961 / 01-07-2019 / Punjab	3,069.000	0.000	0.000	321.698	321.698	411.548	575.245	1,760.509
4858	National Program For Enhancing Profitability Through Increasing Productivity Of Wheat 01371900962 / 01-07-2019 / Punjab	9,136.972	0.000	0.000	1,378.070	1,378.070	2,264.307	2,269.840	3,224.755
4859	National Program For Enhancing Profitability Through Increasing Productivity Of Rice 01371900963 / 01-07-2019 / Punjab	4,632.760	0.000	0.000	698.286	698.286	1,012.501	1,176.267	1,745.706
4860	National Program for Productivity Enhancement of Sugarcane. 01371900964 / 01-07-2019 / Punjab	1,737.700	0.000	0.000	746.000	746.000	300.300	292.300	399.100
4861	National Program for Enhancing Command Area of Small and Mini Dams in Barani Areas of Pakistan(SMART, DLI-11) 01381900529 / 01-07-2019 / Attock,Bhakkar,Chakwal,Dera Ghazi Khan,Gujrat,Jhelum,Khushab,Layyah,Mi anwali,Rejanpur,Rawalpindi,Sialkot	1,592.926	0.000	0.000	126.643	126.643	281.733	391.655	792.895
4862	Program for Establishment of Model Markets in Punjab 01381900957 / Un-Approved / Dera Ghazi Khan,Lahore,Rawalpindi	21,275.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000
			Local:	0.000	0.000	0.000			
			Foreign:	0.000	1.000	1.000			

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				Cap.	Rev.	G.Total (Cap.+Rev.)	2020-21	2021-22	
1	2	3	4	5	6	7	8	9	10
4863	Acquisition of Land for Establishment of Model Markets at Rawalpindi, D.G. Khan & Sheikhpura/Gujranwala and Earth filling/ Construction of Boundary wall 01381900959 / Un-Approved / Dera Ghazi Khan, Gujranwala, Lahore, Rawalpindi, Sheikhpura	1,150.000	0.000	0.000	1,150.000	1,150.000	0.000	0.000	0.000
Total: PM's Package		60,927.412	0.000	0.000	6,073.086	6,073.086	6,553.648	9,642.856	17,383.822
Water Management									
4864	Promotion of High value Agriculture through Solarization of Drip & sprinkler Irrigation Systems (SMART, DLI-4b) 01371900933 / Un-Approved / Punjab	2,000.000	0.000	0.000	600.000	600.000	800.000	600.000	0.000
4865	Pilot testing of Innovative Technologies to improve water use efficiency.(SMART, DLI-11) 01371900937 / Un-Approved / Punjab	50.000	0.000	0.000	10.000	10.000	40.000	0.000	0.000
4866	Transforming the Indus basin with climate resilient agriculture and climate-smart water management (FAO Assisted) (SMART, DLI-11) 01381800095 / Un-Approved / Dera Ghazi Khan, Khanewal, Lodhran, Multan, Muzaffargarh	825.000	0.000	0.000	1.000	1.000	300.000	300.000	224.000
Total: Water Management		2,875.000	0.000	0.000	611.000	611.000	1,140.000	900.000	224.000
Total: NEW SCHEMES		69,432.412	0.000	133.000	8,422.086	8,555.086	11,012.648	10,982.856	17,607.822
PPP PROJECT									
PPP									
4867	Establishment of Model Auction Market Sheikhpura/Gujranwala (Under PPP Mode) 01211902553 / Un-Approved / Sheikhpura	1.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000
Total: PPP		1.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000
Total: PPP PROJECT		1.000	0.000	0.000	1.000	1.000	0.000	0.000	0.000
Grand Total		131,403.773	35,962.001	496.171	15,003.829	15,500.000	25,943.243	11,723.048	17,607.822