

# **AGRICULTURE**

## **IMPORTANCE OF AGRICULTURE IN PUNJAB**

Agriculture is central to economic growth and development in Punjab. Nationally, majority of the population directly or indirectly depends on this sector. It employs 43.7% of the country's labour force and contributes in the growth of other sectors of the economy. 83% of national cotton production is from Punjab, 80% of wheat, 97% of fine aromatic rice, 63% of sugarcane and 51% of maize. Among fruits, 66% of national mango production 95% of citrus is from Punjab.

The government has envisioned enhancing growth in agriculture sector by facilitating agriculture productivity, increasing competitiveness in agriculture marketing and trade by providing a conducive climate for private investment, improving supply chain and value addition.

## **BENEFITS OF ECONOMIC GROWTH IN AGRICULTURE**

The Government believes that increasing income in the agriculture sector will have wide-ranging positive impacts due to the large share of agriculture and related industries in national output as well as employment. Increasing agricultural growth results in more-than-proportionate increase in household income compared to growth in other sectors. Most importantly, fast agriculture growth improves the income of poor households substantially.

## **VISION**

Self-reliance, food security and promotion of exportable high value crops in agriculture and transforming agriculture sector into a vibrant, diversified, sustainable and market driven sector through improved practices, efficient use of resources, and limiting losses due to insects, pests, salinity, alkalinity and revamping existing marketing system.

## **OBJECTIVES / POLICY**

- Food security management in holistic manner.
- Emphasis on innovative technologies to bring vertical crop productivity.
- Increase farmer's income through increased crop productivity, better support price and diversified agriculture practices.

- Emphases on high value agriculture i.e. flowers, fruit and vegetable production and productivity.
- Efficient water conveyance and application through improved water courses, precision land leveling and drip and sprinkler irrigation.
- Sustained productivity improvement in wheat, rice, cotton and maize by encouraging public sector research and collaboration.
- Explore renewable and alternate energy resources in agriculture.
- Develop value chains and enforce input/output certification mechanism.
- Enhancing vegetable production in Punjab.
- Promotion of pulses production and ensure its availability on affordable prices.
- Efficient market infrastructure to ensure optimal value addition.
- Strengthen Research-Extension-Farmer linkage.
- Ensure quality and purity of farm inputs.
- Strengthening Research and Extension services.
- Promotion of diversified crops like Olives and Grapes in Pothohar region.

## **STRATEGY**

- Vertical enhancement in crop productivity through resource and emerging need based oriented innovative technologies
- Emphasis on horticulture, cotton and maize
  - Encouraging participation of private sector research
  - Favorable horticulture policies
- Development of value chain and establishment of food certification mechanism
- Improvement of infrastructure and capacity building of research and extension
  - Incentives to scientists to deliver
  - International coordination
  - Private sector participation
  - Exploring renewable energy resources in agriculture
- Increase farmers income
  - Diversified agriculture
  - Enhancing cotton and maize productivity
- Increase in national income
- Enhancing Crop Productivity through adoption of new technologies
- Eradication of poverty

- Enhancement of fruit & vegetable production and productivity
  - Improve seed quality
  - Introduction of good management practices
  - Extension in shelf life
  - Availability of certified nursery plants
  - Develop value chain by engaging modern super markets
  - Transform supply-based to demand oriented production
  - Establish food certification system
- Upgrading of 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
- Development of efficient marketing infrastructure
- Strengthening of triangle linkages among farmer-Research & Extension

#### OUTCOME BASED TARGETS 2014-15

Activities	2013-14		2014-15
	Targets	Achievements	Targets
Improvement of Water courses (No.)	1,500	1,500	1,525
Installation of irrigation system (Acres)	7,000	7,000	10,000
Provision of LASER Units to Service Providers/ Farmers (No.)	700	1,500	300
Training courses on Improved Water Management Practices (No.)	143	143	150
Rehabilitation of Irrigation Schemes in Non-Canal Commanded areas (No.)	500	500	500
Installation of Biogas Plants/ Tube wells (No.)	--	--	13,000
Analysis of Soil Samples for Advisory Services (No.)	250,000	250,000	250,000
Demonstration of Plots for Enhancing Vegetable Production (No.)	--	--	375
Demonstration of Plots for Promotion of Pulses Cultivation (No.)	--	--	496
Analysis of Residue Samples (No.)	8,800	9,100	10,000
<ul style="list-style-type: none"> <li>• Pesticide (Advisory samples)</li> </ul>	8,000	8,300	8,400

• Pesticide (Residue Samples)	300	300	1,000
• Nitrate	250	250	300
• Heavy Metals	250	250	300

## TREND OF ALLOCATIONS

*Rs. in Million*

Sr.No.	Year	Allocation
1.	2010-11	3,200.000
2.	2011-12	3,400.000
3.	2012-13	5,040.000
4.	2013-14	5,230.000
5.	2014-15	7,960.000

**MTDF 2014-17**  
**Agriculture**  
**Development Programme 2014-15**

(Million Rs.)

Sub-Sector	Capital	Revenue	Total	F. Aid	Total
<b>Ongoing Schemes</b>					
Regular	339.121	1,913.713	2,252.834	4,670.000	<b>6,922.834</b>
<b>Total</b>	<b>339.121</b>	<b>1,913.713</b>	<b>2,252.834</b>	<b>4,670.000</b>	<b>6,922.834</b>
<b>New Schemes</b>					
Regular	53.004	984.162	1,037.166	0.000	<b>1,037.166</b>
<b>Total</b>	<b>53.004</b>	<b>984.162</b>	<b>1,037.166</b>	<b>0.000</b>	<b>1,037.166</b>
<b>Total (ongoing+new)</b>	<b>392.125</b>	<b>2,897.875</b>	<b>3,290.000</b>	<b>4,670.000</b>	<b>7,960.000</b>
<b>Development Program 2015-16</b>					
<b>Ongoing Schemes</b>					
Regular	100.000	3,205.000	3,305.000	4,695.000	<b>8,000.000</b>
<b>Total</b>	<b>100.000</b>	<b>3,205.000</b>	<b>3,305.000</b>	<b>4,695.000</b>	<b>8,000.000</b>
<b>New Schemes</b>					
Regular	2,400.000	5,600.000	8,000.000	0.000	<b>8,000.000</b>
<b>Total</b>	<b>2,400.000</b>	<b>5,600.000</b>	<b>8,000.000</b>	<b>0.000</b>	<b>8,000.000</b>
<b>Total (ongoing+new)</b>	<b>2,500.000</b>	<b>8,805.000</b>	<b>11,305.000</b>	<b>4,695.000</b>	<b>16,000.000</b>
<b>Development Program 2016-17</b>					
<b>Ongoing Schemes</b>					
Regular	3,000.000	5,000.000	8,000.000	5,000.000	<b>13,000.000</b>
<b>Total</b>	<b>3,000.000</b>	<b>5,000.000</b>	<b>8,000.000</b>	<b>5,000.000</b>	<b>13,000.000</b>
<b>New Schemes</b>					
Regular	2,500.000	7,500.000	10,000.000	0.000	<b>10,000.000</b>
<b>Total</b>	<b>2,500.000</b>	<b>7,500.000</b>	<b>10,000.000</b>	<b>0.000</b>	<b>10,000.000</b>
<b>Total (ongoing+new)</b>	<b>5,500.000</b>	<b>12,500.000</b>	<b>18,000.000</b>	<b>5,000.000</b>	<b>23,000.000</b>
<b>MTDF 2014-17: Grand Total</b>					<b>46,960.000</b>

## AGRICULTURE: SUMMARY

(Million Rs.)

Type / Sub Sector	No. of Schemes	Provision for 2014-15				Projection for 2015-16	Projection for 2016-17
		Capital	Revenue	Foreign Aid	G. Total (Cap+Rev)		
<b><u>ON-GOING SCHEMES</u></b>							
AGRICULTURE RESEARCH	8	196.936	42.910	0.000	239.846	19.000	9.420
AGRICULTURE MECHANIZATION	3	142.185	1,146.642	0.000	1,288.827	768.340	0.000
AGRICULTURE EXTENSION	2	0.000	233.870	0.000	233.870	206.060	113.820
WATER MANAGEMENT	1	0.000	0.000	4,670.000	4,670.000	4,680.505	3,986.606
AGRICULTURE EDUCATION	1	0.000	250.000	0.000	250.000	141.166	0.000
ECONOMICS AND MARKETING	1	0.000	240.291	0.000	240.291	656.439	520.217
<b>Total: ON-GOING SCHEMES</b>	<b>16</b>	<b>339.121</b>	<b>1,913.713</b>	<b>4,670.000</b>	<b>6,922.834</b>	<b>6,471.510</b>	<b>4,630.063</b>
<b><u>NEW SCHEMES</u></b>							
AGRICULTURE RESEARCH	3	17.204	14.250	0.000	31.454	15.806	4.711
AGRICULTURE MECHANIZATION	1	10.000	2.000	0.000	12.000	17.500	2.500
AGRICULTURE EXTENSION	4	0.000	267.712	0.000	267.712	261.361	133.300
WATER MANAGEMENT	1	0.000	30.000	0.000	30.000	0.000	0.000
FLORICULTURE	1	10.000	15.000	0.000	25.000	75.000	50.000
AGRICULTURE INFORMATION	1	9.800	0.200	0.000	10.000	0.000	0.000
AGRICULTURE EDUCATION	5	0.000	651.000	0.000	651.000	1,133.478	1,114.766
SOIL SURVEY OF PUNJAB	1	6.000	4.000	0.000	10.000	10.000	10.000
<b>Total: NEW SCHEMES</b>	<b>17</b>	<b>53.004</b>	<b>984.162</b>	<b>0.000</b>	<b>1,037.166</b>	<b>1,513.145</b>	<b>1,315.277</b>
<b>Grand Total</b>	<b>33</b>	<b>392.125</b>	<b>2,897.875</b>	<b>4,670.000</b>	<b>7,960.000</b>	<b>7,984.655</b>	<b>5,945.340</b>

# AGRICULTURE

(Million Rs.)

GS No	Scheme Information Approval Date / Location / scheme ID	Est. Cost	Accum. Exp June,14	Provision for 2014-15			MTDF Projections		Throw fwd Beyond June, 2017
				Cap	Rev	G. Total (Cap+Rev)	2015-16	2016-17	
1	2	3	4	5	6	7	8	9	10

## ON-GOING SCHEMES

### AGRICULTURE RESEARCH

2261	Rapid and Mass Multiplication of Olive and Grapes through Conventional and Micro-Propagation Techniques 14.10.13 Chakwal 01-1304000-001	89.341	23.659	33.950	7.890	41.840	6.850	9.420	7.530
2262	Strengthening of Research Facilities at Fodder Research Sub-station, AARI, Faisalabad for the Development of Silage type Corn Varieties 06.09.13 Faisalabad 01-1309000-002	13.836	7.479	3.737	2.620	6.357	0.000	0.000	0.000
2263	Up-Scaling of Fiber Quality and Infrastructure Facilities of Cotton in Punjab 29.07.13 Faisalabad 01-1309000-003	57.530	12.579	41.190	3.620	44.810	0.000	0.000	0.000
2264	Construction of Hostel Facilities for Female Employees and Farmers Facilitation Center at AARI-Faisalabad 29.07.13 Faisalabad 01-1309000-004	23.741	7.854	15.187	0.700	15.887	0.000	0.000	0.000
2265	Strengthening of Food Technology & PHRC, Ayub Agricultural Research Institute, Faisalabad 29.07.13 Faisalabad 01-1309000-005	62.695	11.236	45.100	5.780	50.880	0.000	0.000	0.000
2266	Development of Genetic Engineering Facilities at Agri. Biotechnology Research Institute, AARI, Faisalabad 29.07.13 Faisalabad 01-1309000-006	69.500	41.000	0.750	15.600	16.350	12.150	0.000	0.000
2267	Up-gradation of Provincial Reference Fertilizer Testing Laboratory at Lahore 29.07.13 Lahore 01-1318000-007	19.000	13.263	5.497	0.090	5.587	0.000	0.000	0.000
2268	Establishment of Provincial Pesticide Reference Laboratory 14.10.13 Sheikhpura , Kalashah kaku 01-1321307-008	147.736	27.226	51.525	6.610	58.135	0.000	0.000	0.000
<b>Sub-Total: AGRICULTURE RESEARCH</b>		<b>483.379</b>	<b>144.296</b>	<b>196.936</b>	<b>42.910</b>	<b>239.846</b>	<b>19.000</b>	<b>9.420</b>	<b>7.530</b>

### AGRICULTURE MECHANIZATION

2269	Construction of New Agricultural Offices Complex, Murree Road & Soil Conservation, Agricultural Engineering Workshops and Offices at Dahgal, Adyala Road, Rawalpindi 14.12.12 Rawalpindi 01-1202000-009	217.743	25.000	125.000	0.000	125.000	67.743	0.000	0.000
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				Cap	Rev	G. Total (Cap+Rev)	2015-16	2016-17	
1	2	3	4	5	6	7	8	9	10
2270	Installation of Biogas Supplemented Agriculture Tubewells for Irrigation Purpose in Punjab 18.01.14 Punjab 01-1499000-010	1,876.347	15.750	17.185	1,142.815	1,160.000	700.597	0.000	0.000
2271	Engagement of Short Term Consultant to Conduct Feasibility Study for Biomass Power Generation in Punjab Province 6.5.14 Punjab 01-1499000-011	9.600	5.773	0.000	3.827	3.827	0.000	0.000	0.000
<b>Sub-Total: AGRICULTURE MECHANIZATION</b>		<b>2,103.690</b>	<b>46.523</b>	<b>142.185</b>	<b>1,146.642</b>	<b>1,288.827</b>	<b>768.340</b>	<b>0.000</b>	<b>0.000</b>
<b>AGRICULTURE EXTENSION</b>									
2272	Enhancing Vegetable Production in Punjab 11.02.14 Punjab 01-1499000-012	410.880	5.910	0.000	158.440	158.440	132.710	113.820	0.000
2273	Promotion of Pulses Cultivation in Punjab 25.03.14 Punjab 01-1499000-013	148.790	0.000	0.000	75.430	75.430	73.350	0.000	0.000
<b>Sub-Total: AGRICULTURE EXTENSION</b>		<b>559.670</b>	<b>5.910</b>	<b>0.000</b>	<b>233.870</b>	<b>233.870</b>	<b>206.060</b>	<b>113.820</b>	<b>0.000</b>
<b>WATER MANAGEMENT</b>									
2274	Punjab Irrigated Agriculture Productivity Improvement Project (PIPIP)-World Bank Assisted Approved Punjab 01-1499000-014	21,249.997	8,620.425	0.000	4,670.000	4,670.000	4,680.505	3,986.606	0.000
			Local:	0.000	0.000				
			Foreign:	0.000	4,670.000				
<b>Sub-Total: WATER MANAGEMENT</b>		<b>21,249.997</b>	<b>8,620.425</b>	<b>0.000</b>	<b>4,670.000</b>	<b>4,670.000</b>	<b>4,680.505</b>	<b>3,986.606</b>	<b>0.000</b>
<b>AGRICULTURE EDUCATION</b>									
2275	Establishment of Sub-campus of University of Agriculture Faisalabad at Chak No. 427/EB, Burewala 07.12.12 Vehari , Burewala 01-1223206-015	541.373	150.207	0.000	250.000	250.000	141.166	0.000	0.000
<b>Sub-Total: AGRICULTURE EDUCATION</b>		<b>541.373</b>	<b>150.207</b>	<b>0.000</b>	<b>250.000</b>	<b>250.000</b>	<b>141.166</b>	<b>0.000</b>	<b>0.000</b>
<b>ECONOMICS AND MARKETING</b>									
2276	Supply chain improvement of selected agriculture and Livestock Products 25.03.14 Punjab 01-1499000-016	1,622.585	73.060	0.000	240.291	240.291	656.439	520.217	0.000
<b>Sub-Total: ECONOMICS AND MARKETING</b>		<b>1,622.585</b>	<b>73.060</b>	<b>0.000</b>	<b>240.291</b>	<b>240.291</b>	<b>656.439</b>	<b>520.217</b>	<b>0.000</b>
<b>Total: ON-GOING SCHEMES</b>		<b>26,560.694</b>	<b>9,040.421</b>	<b>339.121</b>	<b>6,583.713</b>	<b>6,922.834</b>	<b>6,471.510</b>	<b>4,630.063</b>	<b>7.530</b>



# AGRICULTURE

(Million Rs.)

GS No	Scheme Information Approval Date / Location / scheme ID	Est. Cost	Accum. Exp June,14	Provision for 2014-15			MTDF Projections		Throw fwd Beyond June, 2017
				Cap	Rev	G. Total (Cap+Rev)	2015-16	2016-17	
1	2	3	4	5	6	7	8	9	10

## NEW SCHEMES

### AGRICULTURE RESEARCH

2277	Additional Facilities for Improvement in Fruit Yield and Quality of Guava, Dates and Pomegranate Un-Approved Punjab 01-1499000-017	21.971	0.000	7.204	5.250	12.454	4.806	4.711	0.000
2278	Development of Castor bean varieties and Sunflower hybrids to enhance the oilseeds production Un-Approved Faisalabad, Bahawalpur, Mianwali , Khanpur 01-1488251-018	10.000	0.000	2.000	3.000	5.000	5.000	0.000	0.000
2279	Establishment of Soil and Water Testing Lab at Chniot and Nankana Sahib Un-Approved Chniot, Nankana Sahib 01-1488000-019	20.000	0.000	8.000	6.000	14.000	6.000	0.000	0.000
<b>Sub-Total: AGRICULTURE RESEARCH</b>		<b>51.971</b>	<b>0.000</b>	<b>17.204</b>	<b>14.250</b>	<b>31.454</b>	<b>15.806</b>	<b>4.711</b>	<b>0.000</b>

### AGRICULTURE MECHANIZATION

2280	Introduction and adaptation of advanced technologies to mechanize various farm operations for enhancing crop production Un-Approved Multan, Faisalabad 01-1488000-020	35.000	0.000	10.000	2.000	12.000	17.500	2.500	3.000
<b>Sub-Total: AGRICULTURE MECHANIZATION</b>		<b>35.000</b>	<b>0.000</b>	<b>10.000</b>	<b>2.000</b>	<b>12.000</b>	<b>17.500</b>	<b>2.500</b>	<b>3.000</b>

### AGRICULTURE EXTENSION

2281	Feasibility Study for Establishment of Agriculture Technology Park Un-approved Sheikhpura , Kalashah Kaku 01-1421307-023	10.000	0.000	0.000	10.000	10.000	0.000	0.000	0.000
2282	Revamping Agriculture Extension Services Un-approved Punjab 01-1499000-021	150.000	0.000	0.000	50.000	50.000	50.000	50.000	0.000
2283	Targeting Malnutrition and Low Productivity through Balanced Use of Fertilizer Un-approved Punjab 01-1499000-022	250.000	0.000	0.000	125.000	125.000	125.000	0.000	0.000
2284	Management of fruit fly with special reference to non-conventional methods Un-Approved Punjab 01-1499000-024	327.811	0.000	0.000	82.712	82.712	86.361	83.300	75.438
<b>Sub-Total: AGRICULTURE EXTENSION</b>		<b>737.811</b>	<b>0.000</b>	<b>0.000</b>	<b>267.712</b>	<b>267.712</b>	<b>261.361</b>	<b>133.300</b>	<b>75.438</b>

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1	2	3	4	5	6	7	8	9	10

## WATER MANAGEMENT

2285	Feasibility Study for bringing Waste Lands of Thal, Pothohar and Cholistan Areas under Cultivation through a comprehensive Strategy Un-Approved Chakwal, Jhelum, Rawalpindi, Khushab, Mianwali, Bhakkar, Layyah, Muzaffargarh, Bahawalpur, Rahim Yar Khan 01-1488000-025	30.000	0.000	0.000	30.000	30.000	0.000	0.000	0.000
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<b>Sub-Total: WATER MANAGEMENT</b>	30.000	0.000	0.000	30.000	30.000	0.000	0.000	0.000
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## FLORICULTURE

2286	Establishment Of Export Oriented Floriculture Centre At Pattoki Un-Approved Kasur , Pattoki 01-1419191-026	150.000	0.000	10.000	15.000	25.000	75.000	50.000	0.000
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<b>Sub-Total: FLORICULTURE</b>	150.000	0.000	10.000	15.000	25.000	75.000	50.000	0.000
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## AGRICULTURE INFORMATION

2287	Up-Gradation Audio and Video Production Facilities in Directorate of Agricultural Information Punjab. Un-Approved Lahore 01-1418187-027	10.000	0.000	9.800	0.200	10.000	0.000	0.000	0.000
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<b>Sub-Total: AGRICULTURE INFORMATION</b>	10.000	0.000	9.800	0.200	10.000	0.000	0.000	0.000
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## AGRICULTURE EDUCATION

2288	Establishment of Sub-Campus of PMAS-Arid Agriculture University Rawalpindi at Attock Un-Approved Attock 01-1401102-032	500.000	0.000	0.000	100.000	100.000	200.000	200.000	0.000
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2289	Establishment of Punjab Bio-Energy Institute (PBI) at UAF. Un-Approved Faisalabad 01-1409000-028	499.244	0.000	0.000	200.000	200.000	183.478	115.766	0.000
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2290	Construction of Girls Hostel for 1000 Students at UAF Un-Approved Faisalabad 01-1409000-029	400.000	0.000	0.000	250.000	250.000	150.000	0.000	0.000
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2291	Establishment of sub-Campus of University of Agriculture Faisalabad at Depalpur District Okara. Un-Approved Okara , Depalpur 01-1420195-031	500.000	0.000	0.000	100.000	100.000	200.000	200.000	0.000
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2292	Establishment of Muhammad Nawaz Shareef University of Agriculture, Multan (Phase-II) Un-Approved Multan 01-1426000-030	1,000.000	0.000	0.000	1.000	1.000	400.000	599.000	0.000
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(Million Rs.)

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				Cap	Rev	G. Total (Cap+Rev)	2015-16	2016-17	
1	2	3	4	5	6	7	8	9	10
<b>Sub-Total: AGRICULTURE EDUCATION</b>		2,899.244	0.000	0.000	651.000	651.000	1,133.478	1,114.766	0.000
<b>SOIL SURVEY OF PUNJAB</b>									
2293	Detailed Soil Survey of Government Agricultural Farms and Strengthening of Soil Survey of Punjab Un-Approved Punjab 01-1499000-033	30.000	0.000	6.000	4.000	10.000	10.000	10.000	0.000
<b>Sub-Total: SOIL SURVEY OF PUNJAB</b>		30.000	0.000	6.000	4.000	10.000	10.000	10.000	0.000
<b>Total: NEW SCHEMES</b>		3,944.026	0.000	53.004	984.162	1,037.166	1,513.145	1,315.277	78.438
<b>Grand Total</b>		30,504.720	9,040.421	392.125	7,567.875	7,960.000	7,984.655	5,945.340	85.968