

Grant No. 40

143 - Ministry of Agriculture

Medium Terms Expenditure

(Taka in Thousands)

Description	Budget 2019-20	Projection	
		2020-21	2021-22
Operating Expenditure	12123,02,00	13335,32,00	14668,85,00
Development Expenditure	1930,38,00	2122,35,00	2335,76,00
Total	14053,40,00	15457,67,00	17004,61,00
Recurrent	12963,50,42	14491,53,99	16188,10,49
Capital	1085,37,76	961,38,58	811,52,38
Financial Asset	4,51,82	4,74,43	4,98,13
Liability	0	0	0
Total	14053,40,00	15457,67,00	17004,61,00

1.0 Mission Statement and Major Functions

1.1 Mission Statement

Making agriculture profitable by enhancing crop production and productivity, crop diversification, nutrient enriched safe crop production and developing modern market system as well as ensuring nutrition and food security for all.

1.2 Major Functions

- 1.2.1 Agricultural research and education program;
- 1.2.2 Agricultural extension and training;
- 1.2.3 Production, standardization, certification, preservation and distribution of quality seeds;
- 1.2.4 Soil survey and examination of the quality of soil, and recommendations;
- 1.2.5 Preservation and marketing of agricultural products;
- 1.2.6 Agricultural support and rehabilitation;
- 1.2.7 Collection, distribution, innovation, procurement and management of agricultural inputs and machinery;
- 1.2.8 Minor irrigation programs.

2.0 Medium Term Strategic Objectives and Activities

Medium-Term Strategic Objectives	Activities	Implementing Departments/Agencies
1	2	3
1. Increased production and productivity of crops	<ul style="list-style-type: none"> Innovation of high yielding varieties of different crops, and technologies 	<ul style="list-style-type: none"> Bangladesh Rice Research Institute Bangladesh Institute of Nuclear Agriculture Bangladesh Agricultural Research Institute Bangladesh Agricultural

Medium-Term Strategic Objectives	Activities	Implementing Departments/Agencies
1	2	3
		Research Council <ul style="list-style-type: none"> • Bangladesh Jute Research Institute • Bangladesh Sugarcrop Research Institute • Cotton Development Board • Bangladesh Wheat and Maize Research Institute
	<ul style="list-style-type: none"> • Innovation of technologies and varieties of rice and other crops tolerant to salinity, drought, water submergence and other adverse conditions. 	<ul style="list-style-type: none"> • Bangladesh Rice Research Institute • Bangladesh Institute of Nuclear Agriculture
	<ul style="list-style-type: none"> • Increasing the use of innovated varieties and technologies by farmers through training, publications and exhibitions/fairs/rallies/seminars/workshops 	<ul style="list-style-type: none"> • Department of Agricultural Extension • Bangladesh Agricultural Research Institute • Bangladesh Agriculture Development Corporation • Bangladesh Rice Research Institute • Bangladesh Institute of Nuclear Agriculture • Bangladesh Jute Research Institute • Bangladesh Sugar-crop Research Institute • Seeds Certification Agency • Cotton Development Board • Agriculture Information Service • Barendra Multipurpose Development Authority • Bangladesh Agricultural Research Council • National Agricultural Training Academy • Bangladesh Wheat and Maize Research Institute
	<ul style="list-style-type: none"> • Providing e-agriculture information services 	<ul style="list-style-type: none"> • Department of Agricultural Extension • Agriculture Information Service • Bangladesh Rice Research Institute • Bangladesh Agricultural Research Institute • Soil Resource Development Institute • Bangladesh Wheat and Maize Research Institute

Medium-Term Strategic Objectives	Activities	Implementing Departments/Agencies
1	2	3
	<ul style="list-style-type: none"> Increasing awareness about food value and nutrition through publications, meetings and workshops 	<ul style="list-style-type: none"> Bangladesh Institute of Research and Training on Applied Nutrition Agriculture Information Service Department of Agricultural Extension
2. Increased supply and availability of agricultural inputs	<ul style="list-style-type: none"> Ensuring supply of fertilizers and other inputs at administered prices 	<ul style="list-style-type: none"> Department of Agricultural Extension Bangladesh Agriculture Development Corporation
	<ul style="list-style-type: none"> Procurement of irrigation and other agricultural machineries and increasing their availability 	<ul style="list-style-type: none"> Bangladesh Agriculture Development Corporation Barendra Multipurpose Development Authority
	<ul style="list-style-type: none"> Expansion of minor irrigation coverage by encouraging optimal use of surface water, and increasing the area of arable land by reducing water logging and submergence 	<ul style="list-style-type: none"> Bangladesh Agriculture Development Corporation Barendra Multipurpose Development Authority
	<ul style="list-style-type: none"> Production, certification, preservation and distribution of breeder, foundation, certified and truthfully labelled seeds 	<ul style="list-style-type: none"> Department of Agricultural Extension Bangladesh Agricultural Research Institute Bangladesh Agriculture Development Corporation Bangladesh Rice Research Institute Bangladesh Institute of Nuclear Agriculture Seed Certification Agency Bangladesh Jute Research Institute Cotton Development Board Bangladesh Sugar-crop Research Institute Barendra Multipurpose Development Authority Bangladesh Wheat and Maize Research Institute
	<ul style="list-style-type: none"> Production, certification, preservation and distribution of breeder, foundation and truthfully labeled seeds with adaptability to adverse environment (salinity, draught and water submergence) 	<ul style="list-style-type: none"> Bangladesh Rice Research Institute Bangladesh Institute of Nuclear Agriculture Seed Certification Agency Bangladesh Agriculture Development Corporation Department of Agricultural Extension

Medium-Term Strategic Objectives	Activities	Implementing Departments/Agencies
1	2	3
		<ul style="list-style-type: none"> • Bangladesh Agricultural Research Institute • Bangladesh Jute Research Institute • Cotton Development Board • Bangladesh Sugar-crop Research Institute • Bangladesh Wheat and Maize Research Institute
	<ul style="list-style-type: none"> • Ensuring standardization of seeds 	<ul style="list-style-type: none"> • Seed Certification Agency
	<ul style="list-style-type: none"> • Meetings, seminars, fairs and exchange of technology to encourage participation of the private sector in production and development of seeds 	<ul style="list-style-type: none"> • Bangladesh Agricultural Research Institute • Bangladesh Agriculture Development Corporation • Bangladesh Jute Research institute • Cotton Development Board • Seed Certification Agency • Bangladesh Wheat and Maize Research Institute
	<ul style="list-style-type: none"> • Marketing and ginning of cotton seed 	<ul style="list-style-type: none"> • Cotton Development Board
3. Development and maintenance of agricultural land resource base management	<ul style="list-style-type: none"> • Identification of soil and land resources through soil survey and classification of land and soil resources in terms of their productivity 	<ul style="list-style-type: none"> • Soil Resource Development Institute
	<ul style="list-style-type: none"> • Extension of soil test facilities to Upazilla and Union levels 	<ul style="list-style-type: none"> • Soil Resources Development Institute
	<ul style="list-style-type: none"> • Popularizing the use of organic fertilizer, green manure and microbial fertilizer among the farmers 	<ul style="list-style-type: none"> • Department of Agricultural Extension • Agriculture Information Service • Bangladesh Institute of Nuclear Agriculture • Soil Resource Development Institute
	<ul style="list-style-type: none"> • Popularizing sustainable soil management technologies among the farmers 	<ul style="list-style-type: none"> • Soil Resources Development Institute
4. Support in supply, processing and effective marketing of agricultural products.	<ul style="list-style-type: none"> • Publicity and preservation of information on agricultural marketing and development 	<ul style="list-style-type: none"> • Cotton Development Board • Department of Agriculture Marketing
	<ul style="list-style-type: none"> • Development and maintenance of market infrastructure and provide other supports 	<ul style="list-style-type: none"> • Department of Agriculture Marketing
	<ul style="list-style-type: none"> • Providing technological support and technical assistance to agricultural entrepreneurs and encouraging their investment in agro-processing and agro- 	

Medium-Term Strategic Objectives	Activities	Implementing Departments/Agencies
1	2	3
	business	
	<ul style="list-style-type: none"> Coordination among concerned public and private departments/institutions for expansion of marketing facilities of agricultural products 	<ul style="list-style-type: none"> Secretariat

3.0 Poverty, Gender and Climate Change Reporting

3.1 Impact of Medium Term Strategic Objectives on Poverty Reduction, Women's Advancement and Climate Change

3.1.1 Increased production and productivity of crops

Impact on poverty reduction: Innovation and extension of different varieties of high yielding paddy, wheat and other crops, tolerant to saline, draught and water submergence, and transfer of technologies, providing agriculture related information through e-agriculture, and higher education and training for agriculture scientists, extension workers, agriculture workers, and farmers created scope for the targeted beneficiaries, particularly the 30-60% small and marginal farmers to be involved in production of high value crops and thereby enhance their earnings. These measures contribute to alleviation of poverty.

Impact on women's advancement: 30% of adult women belonging to about 1.51crore farming households are directly/indirectly involved in crop production. Production of high value crops will create employment opportunities for women. Further, through targeted programs, women and children will get access to nutritious food. Women's participation in management of different targeted activities such as homestead fruits and vegetable gardening, crop yielding activities as well as production and preservation of seeds will promote their employment potential, increase their income level and social status.

Impact on Climate Change Adaptation and Mitigation: To cope with the negative impacts of climate change, salinity, drought and flood resistant rice, wheat and other crop varieties are being developed and cultivated. As a result, productivity of crops continues to increase despite negative climatic impacts. Integrated pest management activities are also reducing negative impacts on the environment.

3.1.2 Increased supply and availability of agricultural inputs

Impact on poverty reduction: Production has increased due to availability of agricultural inputs and increase of agriculture credits and as such, opportunity of farmer's income is being enhanced. Income and production including opportunity of employment generation are increasing for the poor people. This will make direct contribution to the alleviation of poverty.

Impact on women's advancement: Women's involvement in income generating activities is being increased with the increase in crop production. As a result, women's unemployment opportunities has been increased.

Impact on Climate Change Adaptation and Mitigation: Timely distribution and efficient delivery of agricultural inputs are creating positive impacts on agricultural adaptation to climate change impacts. Efficient use of surface water has reduced the pressure on ground water extraction for irrigation purposes. Extension of improved irrigation methods has also improved the adaptive capacity of crops in the climate vulnerable regions.

3.1.3 Development and maintenance of Agricultural land resource base management.

Impact on poverty reduction: Different activities like soil analysis and increasing popularity of balanced fertilizers such as organic, green and bio fertilizer will help small and marginal farmers of drought and famine prone areas to reduce the cost needed to protect the productivity of their land. As a result,

production cost of the crops will reduce, economic solvency of the poor people will increase and thus poverty will be reduced.

Impact on women's advancement: Women's involvement in the preparation of organic and compost fertilizers creates their employment and increases their income levels.

Impact on Climate Change Adaptation and Mitigation: Along with the cropping, use of organic fertilizers, green fertilizers and germ fertilizers helps improving soil health at the local level to reduce the impacts of climate change.

3.1.4 Support in supply, processing and effective marketing of agricultural products

Impact on poverty reduction: Development of agricultural marketing and ensuring fair price for agricultural products have positive impact on the economic conditions of farmers. Creation of new market places and warehouses for crops reduces the influence of intermediaries, ensures fair price for products, improves economic conditions of farmers and helps to reduce the poverty of small and marginal farmers. Through encouraging investment in agri-business and agriculture programs, different labor-intensive activities such as trading in seeds, cultivation of mushroom, fruits, flowers, cactus and decorating plants create employment opportunities for the rural labor force.

Impact on women's advancement: Women are getting employed in increasing numbers through targeted agro-processing and agro-business activities. These activities promote women's participation in the labour market and enhance their social status and rights in accessing government resource and services.

Impact on Climate Change Adaptation and Mitigation: By creating and reforming market infrastructure and storage facilities together with technical support provision, agricultural entrepreneurs are being encouraged to use climate resilient technology, and invest in agri-businesses and processing. In addition, in emergency situations, seeds are being distributed to the farmers at the quickest possible time by expanding agricultural products' marketing facility and ensuring synergy between relevant government and private offices/organizations.

3.2 Poverty Reduction, Women's Advancement and Climate Change Related Allocation

(Taka in Thousand)

Description	Budget 2019-20	Projection	
		2020-21	2021-22
Poverty Reduction	11700,91,64	12368,78,53	13064,74,90
Gender	6312,16,26	6598,74,46	6755,11,65
Climate Change	5308,83,70	5713,63,12	5845,32,81

4.1 Priority Spending Areas/Programmers

Priority Spending Areas/Programmers	Related Medium Term Strategic Objectives
<p>1. Conduct research activities to increase production of rice, wheat, sugarcane and other crops</p> <p>On an average, 1% of total cultivable land of the country is shrinking every year due to industrialization, urbanization and growth of population. To meet the food requirement of the increasing population, increasing food production has become crucial. In this context, agricultural research activities to increase per hectare yield of rice, wheat, sugarcane and other crops and to produce crops of short duration and relay crops have been given the highest priority.</p>	<ul style="list-style-type: none"> • Increase production and productivity of crops • Increase supply and availability of agricultural inputs
<p>2. Production of quality seeds and determination of the right standard</p> <p>The use of quality seeds is essential to increase crop yield. Production and supply of quality seeds according to the needs of farmers has therefore been given the second highest priority.</p>	

Priority Spending Areas/Programmers	Related Medium Term Strategic Objectives
3. Activities related to extension of improved crop production technologies among the farmers (training, demonstrations, field days, rallies, fairs, media publicity) Extension of improved crop production technologies among the farmers is crucial to increase agricultural production. Accordingly, providing training for using improved technologies, observing field day, field demonstrations, rallies, agricultural fairs and publicity using e-agriculture information services are given the third highest priority.	
4. Optimal use of the surface water Optimal use of surface water helps the expansion of minor irrigation infrastructure and increases availability of arable land through removal of water logging and water submergence. Hence, this sector has been given priority.	
5. Supply of sufficient agricultural products by expansion of Information and Communication Technology at the field level Promotion of ICT applications such as e-agriculture to enable continuous and timely access to credible and accurate crop related information and advice, at the field level, has been accorded priority.	<ul style="list-style-type: none"> Support in supply, processing and effective marketing of agricultural products
6. Optimal use of organic fertilizers in crop cultivation The use of organic, green and bio fertilizers is necessary to preserve soil quality, improve soil health, reduce the dependency on chemical fertilizers, and increase crop yield. In this context, the inclusion of organic fertilizers in crop production has been considered as a priority area.	<ul style="list-style-type: none"> Development and maintenance of Agricultural land resource base management

4.2 Medium Term Expenditure Estimates and Projection (2019-20 to 2021-22)

4.2.1 Expenditure by Department/Agencies/Institutional Units

(Taka in Thousands)

Description	Budget	Revised	Budget 2019-20	Projection	
	2018-19			2020-21	2021-22
Secretariat, Ministry of Agriculture	11584,65,79	10412,14,39	11503,66,00	12959,77,16	14564,00,26
Head Office, Department of Agricultural Extension	750,30,39	818,91,29	738,09,71	661,03,52	554,32,24
Offices of the Additional Director, Department of Agricultural Extension (DAE)	16,02,17	19,11,21	17,83,57	18,64,80	19,35,41
Offices of the Deputy Director, Department of Agricultural Extension (DAE)	111,21,16	81,68,57	115,77,02	121,17,33	126,21,66
Offices of the Upazila Agricultural Officer	1066,35,23	1053,32,84	1210,36,64	1279,31,00	1338,36,72
Offices of the Metropolitan Thana Agricultural Officer	12,61,90	14,02,79	14,36,57	13,74,50	14,35,07
Horticulture Centres, Department of Agricultural Extension	75,96,54	84,89,68	70,10,02	75,80,25	78,35,55
Plant Quarantine Stations, Department of Agricultural Extension	13,18,42	16,61,07	14,18,95	14,84,11	15,36,79
Agricultural Training Institutes	38,03,73	42,90,84	39,31,52	41,63,75	43,19,90
Head Office, Seed Certification Agency	9,57,51	10,39,04	30,10,50	30,43,55	26,93,69
Regional Seed Certification Offices & Seed Laboratories	3,56,00	3,71,45	4,01,71	4,50,47	4,72,31
District Seed Certification Offices	17,70,00	15,05,46	16,29,79	18,26,46	18,97,35
Head Office, Agricultural Information Service	33,27,77	29,35,17	31,19,85	33,68,72	26,55,91
Regional Offices, Agricultural Information Service	5,42,81	5,69,81	6,11,15	6,50,25	6,83,30
Head Office, Department of Agricultural Marketing	11,73,39	18,54,16	64,88,50	15,15,63	11,38,94
Divisional Agricultural Marketing Offices	3,90,05	4,24,77	4,30,55	5,42,20	5,64,80
Zonal Offices Department of Agricultural Marketing	1,62,00	1,75,34	1,84,55	2,02,15	2,11,15

Description	Budget	Revised	Budget 2019-20	Projection	
	2018-19			2020-21	2021-22
District Marketing Offices, Department of Agricultural Marketing	12,61,12	12,19,74	12,61,35	14,20,05	14,82,85
Upazila Marketing Offices, Department of Agricultural Marketing	31,13	30,35	36,22	35,52	37,17
Regional Training Centers, Department of Agricultural Marketing	31,31	32,46	1,25,83	2,41,25	2,70,45
Head Office, Soil Resource Development Institute	33,06,00	36,01,85	37,12,81	44,84,33	32,68,38
Regional Offices of Soil Resource Development Institute	4,61,50	4,86,30	5,35,73	5,66,01	5,92,13
District Offices of Soil Resource Development Institute	7,03,00	7,50,45	8,31,21	9,12,88	9,65,31
Central Laboratories, Soil Resource Development Institute	1,00,00	1,52,78	1,46,40	1,69,96	1,81,70
Regional Laboratories, Soil Resource Development Institute	9,44,18	9,64,09	10,73,85	11,34,06	11,90,97
Cotton Development Board	20,83,73	19,76,16	20,19,98	6,09,57	6,32,62
Regional Offices, Cotton Development Board	2,93,81	3,08,84	3,13,87	3,26,22	3,35,82
Zonal Offices, Cotton Development Board	27,66,00	27,93,13	29,03,97	31,17,27	31,96,27
Cotton Research, Training and Seed Multiplication Farms, Cotton Development Board	11,56,86	12,10,65	12,08,18	12,97,43	13,34,18
National Agricultural Training Academy (NATA)	28,13,49	24,86,78	29,24,00	12,56,60	13,02,10
Grand Total :	13914,66,99	12792,51,46	14053,40,00	15457,67,00	17004,61,00

4.2.2 Expenditure by Economic Group

(Taka in Thousands)

Economic Group	Description	Budget	Revised	Budget 2019-20	Projection	
		2018-19			2020-21	2021-22
	Recurrent Expenditure					
3111	Wages and salaries in cash	1592,83,73	1446,75,96	1651,88,70	1945,19,39	1993,17,80
3211	Administrative expenses	85,09,29	96,40,22	99,18,15	59,72,27	60,09,49
3221	Fees, charges and commissions	8,35,39	10,75,20	7,97,20	6,76,12	6,54,53
3231	Training	123,90,68	267,20,93	35,62,52	15,43,39	26,84,49
3241	Domestic travel and transfer	0	2,23,44	0	0	0
3242	Foreign travel and transfer	0	60,00	0	0	0
3243	Petrol, oil and lubricants	12,63,62	21,86,11	21,98,94	12,98,00	13,02,77
3244	Travel and Transfer	37,00,43	38,16,65	39,87,01	34,83,46	35,28,96
3251	Agriculture supplies	209,47,42	266,91,95	266,99,34	252,30,93	251,93,88
3252	Medical and surgical supplies	31,20	39,68	92,82	43,42	43,42
3253	Public order and safety supplies	1,22,00	1,11,75	85,55	93,55	94,55
3254	Food supplies	0	5,00	2,00	0	0
3255	Printing and stationery	18,70,61	26,27,84	25,31,61	20,68,50	20,75,87
3256	General supplies and materials	9,81,14	20,85,11	17,22,76	15,95,72	11,64,81
3257	Professional services, honorariums and special expenses	192,34,67	143,47,77	94,58,34	25,28,80	11,48,24
3258	Repairs and maintenance	204,63,78	69,91,04	57,34,59	29,50,95	27,36,96
3511	Public nonfinancial corporations subsidies	9000,00,00	8069,31,75	9000,00,00	9000,00,00	9000,00,00
3631	Current grants	1158,99,22	1130,56,66	1105,70,89	1145,69,64	1163,77,72
3632	Capital grants	53,00	15,00,00	55,63,00	21,42,77	22,67,71
3731	Employment-related social benefits in cash	0	12,00	0	0	0
3821	Current transfers not elsewhere classified	5,40,75	6,87,17	7,62,55	5,28,85	5,29,57
3823	Current transfers for projects	0	0	204,10,28	557,53,66	530,96,27
3911	Reserve	152,74,49	5,08,49	101,36,23	1341,54,57	3005,83,45
	Total : - Recurrent Expenditure	12814,01,42	11639,94,72	12963,50,42	14491,53,99	16188,10,49

Economic Group	Description	Budget	Revised	Budget	Projection	
		2018-19		2019-20	2020-21	2021-22
	Capital Expenditure					
4111	Buildings and structures	488,39,66	718,69,95	231,90,75	122,73,14	42,74,89
4112	Machinery and equipment	570,00,06	364,09,73	163,35,36	252,69,30	216,94,16
4113	Other fixed assets	74,03	3,36,62	3,65,65	1,69,80	1,44,60
4141	Land	31,00,00	56,64,48	5,51,00	1,00	1,00
4211	Capital expenditure for project	0	0	680,95,00	584,25,34	550,37,73
4911	Reserve	6,00,00	5,24,14	0	0	0
	Total : - Capital Expenditure	1096,13,75	1148,04,92	1085,37,76	961,38,58	811,52,38
	Assets					
7215	Loans	4,51,82	4,51,82	4,51,82	4,74,43	4,98,13
	Total : - Assets	4,51,82	4,51,82	4,51,82	4,74,43	4,98,13
	Grand Total :	13914,66,99	12792,51,46	14053,40,00	15457,67,00	17004,61,00

5.0 Key Performance Indicator (KPIs)

Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
			2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10
1. Innovated varieties of improved crops and technologies	1	Number	81	85	79				
a. Developed Variety.	1	Number				28	37	36	36
b. Developed Technology.	1	Number				50	76	78	80
2. Extended coverage of soil sample testing facilities to determine soil standards	3	%	12.00	12.27	12.0	12.9	13.5	14.00	14.00
3. Extended coverage of minor irrigation facilities on agricultural land and increase of arable land	1, 2	Hectares (lakh)	10.36	10.45	10.60	10.85	10.98	11.00	11.25
		%	13.91	13.91	14.23	14.36	14.64	15.03	15.34
4. Production of major crops									
a) Rice	1,2,4	M.T. (Crore)	3.555	3.62	3.56	3.64	3.85	3.85	3.85
b) Wheat		M.T. (Lakh)	12.80	10.99	15.31	13.00	11.50	11.55	11.60
c) Potato		M.T. (Lakh)	100.00	97.44	51.50	99.96	100.00	100.20	100.30
d) Oil Seed		M.T. (Lakh)	11.015	9.70	10.31	10.59	11.12	11.14	11.16
e) Vegetable		M.T. (Lakh)	182.59	159.54	145.37	164.59	164.56	164.78	164.85
f) Maize		M.T. (Lakh)	38.97	38.93	32.00	38.28	40.00	41.00	41.50
g) Spices		M.T. (Lakh)	32.45	37.12	31.90	37.88	38.00	38.12	38.23
h) Pulse		M.T. (Lakh)	11.015	10.38	10.31	10.50	11.00	11.20	11.25
i) Jute		bel (Lakh)	88.40	88.95	76.60	74.39	80.08	80.13	80.22

6.0 Recent Achievements, Activities, Output Indicators and Targets and Expenditure Estimates of the Departments/Agencies

6.1 Secretariat

6.1.1 Recent Achievements: During the last three years (2015-16 to 2017-18) due to government policies and initiatives 1049.01 lakh MT rice, 38.61 lakh MT wheat, 93.84 lakh MT maize, 300.81 lakh MT potato and 447.04 lakh MT vegetables were produced. During this period, a total of 3.76 lakh MT seeds of different crops have been supplied and about TK. 15106.69 crore has been disbursed as subsidy on fertilizer and other agricultural inputs and about TK 379.69 crore for agricultural rehabilitation. Agricultural machineries have been supplied to the farmers at 50-70% reduced price. A total of 276 high yielding varieties and technologies have been innovated some of which are tolerant to salinity, drought and water submergence by this stipulated time.

6.1.2 Activities, Output Indicators and Target

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
1. Coordination among concerned public and private institutions for expansion of marketing facilities	Coordination meeting	4	No.	4	4	4	4	4	4	4

6.1.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects

(Taka in Thousands)

Name of the Institutional Unit/Scheme/Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
General Activity							
1430101 - Secretariat, Ministry of Agriculture	1-4	78,00,58	27,16,02	29,46,96	31,70,89	1043,30,92	2274,60,30
Total : General Activity		78,00,58	27,16,02	29,46,96	31,70,89	1043,30,92	2274,60,30
Special Activity							
120000615 - Agriculture Subsidy Management	1	3479,58,13	9000,00,00	8000,00,00	9000,00,00	9000,00,00	9000,00,00
120000801 - Loans to Government Employees	-	0	0	0	4,51,82	4,74,43	4,98,13
120006504 - Agricultural Research Program	1-3	0	12,00,00	12,00,00	1,00	1,00	1,00
120006505 - Agriculture Rehabilitation Assistance	1	0	120,00,00	120,00,00	120,00,00	120,00,00	120,00,00
120007600 - Examination Expense Management	1-4	0	67,55	2,37,06	0	0	0
120009900 - Unnayan mela	1-4	0	50,00	50,00	1,00,00	1,00,00	1,00,00
120011000 - Exhibition and Adoption	1-4	0	60,00,00	60,00,00	75,00,00	141,00,00	141,00,00
120011100 - Agricultural fair and Exhibition	1-4	0	5,50,00	5,50,00	7,50,00	7,86,00	8,89,00
127000601 - Asia Pacific Association of Agricultural research Institutions (APAARI)	-	0	0	0	9,00	9,00	9,00
127001101 - Asia and the Pacific plant protection Commission (A.P.P.P.C.)	-	0	0	0	10,00	10,00	10,00
127002801 - CGIAR	-	0	0	0	1,76,00	1,76,00	1,76,00
127003601 - Commonwealth Agriculture Bureau	-	0	0	0	16,00	16,00	16,00
127005801 - FAO (Food and Agriculture Organisation)	-	0	0	0	63,90	63,90	63,90
127009901 - International Treaty on Plant Genetic Resources for Food and Agriculture	-	0	0	0	1,00	1,00	1,00
127011901 - International Seed Testing Association (ISTA)	-	0	0	0	7,00	7,00	7,00
127017301 - UNESCO	-	0	0	0	10,00	10,00	10,00
Total : Special Activity		3479,58,13	9198,67,55	8200,37,06	9210,95,72	9277,54,33	9278,81,03
Support Activity							
136000600 - Asia Pacific Association of Agricultural research Institutions (APAARI)	1	0	9,00	9,00	0	0	0
136001100 - Asia and the Pacific plant protection Commission (A.P.P.P.C.)	1	0	10,00	10,00	0	0	0
136002600 - CAPSA	1	0	10,00	10,00	0	0	0
136002800 - CGIAR	1	0	88,00	88,00	0	0	0
136003600 - Commonwealth Agriculture Bureau	1	0	16,00	16,00	0	0	0
136005800 - FAO (Food and Agriculture Organisation)	1	0	63,90	63,60	0	0	0
136009900 - International Treaty on Plant Genetic Resources for Food and Agriculture	1	0	1,00	1,00	0	0	0
136011900 - International Seed Testing Association (ISTA)	1	0	7,00	7,00	0	0	0
136017300 - UNESCO	1	0	5,00	5,30	0	0	0
Total : Support Activity		0	2,09,90	2,09,90	0	0	0
Total : Operating Activities		3557,58,71	9227,93,47	8231,93,92	9242,66,61	10320,85,25	11553,41,33

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Development Activities							
Non-Annual Development Program							
213000143 - Reserve Allocation for Schemes of Ministry of Agriculture	1	60	20,09,14	3,87,25	12,11,73	147,40,30	190,00,00
213031201 - Production, Dissemination and Postharvest Technology Development of Sunflower for Saline lands of Coasts Region	-	0	0	0	66,90	53,04	0
213031301 - Innovation and dissemination of formulated bio-product from novel endophytic Bacillus species for controlling wilting of eggplant	-	0	0	0	1,97,00	85,00	0
213031401 - Program on Varietal Development, Production and Post-harvest Technology of Orchid, Cactus-Succulent, Corm and Bulbous Flower and their Dissemination in Bangladesh	-	0	0	0	1,56,00	1,45,00	0
213031501 - Enhancement of nutritional status and economic condition of charland farmers through development of modern groundnut varieties and intercropping technologies	-	0	0	0	41,50	40,00	0
213031601 - Strengthening of New Generation Rice (C4-Rice) Research	-	0	0	0	4,33,00	70,00	0
213031701 - Establishment of a Rice Museum at Bangladesh Rice Research Institute	-	0	0	0	50,00	25,00	0
213031801 - Strengthening Research Activities of BINA Sub-Station	-	0	0	0	1,26,50	1,01,50	0
213032001 - Diversified uses of Jackfruit through processing programme	-	0	0	0	1,11,00	1,14,00	0
213032101 - Medicinal plants (Arjun, Ashwagandha, Ghritakumari, Shotomuli) cultivation extension programme	-	0	0	0	1,72,00	1,57,00	0
213032201 - Integration of Farmers Information Agriculture Portal Programme	-	0	0	0	2,80,00	0	0
213032301 - Minor irrigation development and giving safe and rapid transportation facility programme to the farmer's at Haor of Kolmakandha Upazila in Netrakona District	-	0	0	0	1,06,00	78,50	0
213032501 - Programme of reduction of water logged area and irrigation area expansion at Kashiani and Maksudpur Upazila in Gopalganj District	-	0	0	0	3,56,50	3,36,25	0
213032601 - Programme for enhancement of surface water utilization in irrigation at Gopalganj Sadar upazila in Gopalganj District	-	0	0	0	4,13,50	2,07,75	0
213032801 - "Plant Biomedical Laboratory Accreditation of Bangladesh Agricultural Research Institute"	-	0	0	0	9,27,45	0	0
Total : Non-Annual Development Program		60	20,09,14	3,87,25	46,49,08	161,53,34	190,00,00
Annual Development Program							
221000143 - Reserve for unapproved project Ministry of Agriculture**	1	0	131,41,00	0	84,05,00	176,63,00	568,42,00
224064000 - National Agricultura Technology Program Phase-2 Project (NATP-2) (PMU Part) (01/10/2015-30/09/2021)	1	1,94,75	20,26,00	8,99,00	22,60,00	1,00,00	2,00,00
Total : Annual Development Program		1,94,75	151,67,00	8,99,00	106,65,00	177,63,00	570,42,00
Total : Development Activities		1,95,35	171,76,14	12,86,25	153,14,08	339,16,34	760,42,00
Total :		3559,54,06	9399,69,61	8244,80,17	9395,80,69	10660,01,59	12313,83,33

6.2 Department of Agricultural Extension

6.2.1 Recent Achievements: In order to meet the demand of food of the growing population, the Department of Agricultural Extension has been able to produce rice, wheat, maize and potato bumper in the last 3 years through the transfer of advanced technology among the farmers. In the last 3 years, total production of rice was 1049.01 million metric tons. A total of 1189.32 lakh MT food grains (rice+ wheat+corn) were produced. A total of 7.22 million exhibitions have been set up for the transfer of technologies at peasant level. In the last 3 years, training programs were arranged for a total of 22.05 lakh farmers on the latest technology, among them 36% were women. A total of 3390 farmers groups/ farmers clubs have been set up to ensure safe food production, processing and marketing of products. Apart from this 22.55 lakh compost / vermi

compost fertilizers have been used in the household and adjoining areas of the farm families to increase the production and utilization of biomass in the soil. In 2008 use of pesticide was 48687 MT, which was reduced to 37258 MT. in 2017. In last 3 years a number of 4,22,21,416 trees were planted to preserve ecological balance.

6.2.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
1. Increase the use of innovated varieties and technologies by farmers through training, publications and exhibitions-fairs-rallies-seminars-workshops	Trained farmers	1	Number in Lakh	7.30	7.37	7.35	7.35	7.50	7.55	760
	Exhibitions conducted			1.40	2.42	1.42	1.42	1.41	1.43	1.44
	Field days/rallies organized		Number (in thousands)	18.00	18.707	18.20	18.20	18.75	18.80	1890
	Agriculture Fairs arranged		Number	380	537	385	385	415	430	435
	Motivational Tours conducted			405	1040	410	410	425	430	432
	Seminar/ Workshop	1	Number	135	135	140	140	110	120	125
2. Providing e-agriculture information services	ICM farmer's groups and farmer's clubs	1	Number	1130	1176	1140	1140	1142	1145	1150
3. Increasing awareness about food value and nutrition through publicity, publication, meeting and workshop	Trained person	1	Number	3250	14290	3300	3300	3350	3356	3360
4. Ensuring supply of fertilizers and other inputs at administered prices	Inspection fertilizer distribution by Agri. Officers	2	No(Thousands)	248	250	249	249	250	252	254
5. Production, certification and distribution of breeder, foundation, certified and truthfully level seeds	Foundation seeds distributed	2	Metric Ton (in thousands)	1.38	1.4	1.40	1.40	1.42	1.43	1.45
6. Production, certification and distribution of breeder, foundation and truthfully level seeds tolerant to salinity, draught and water submergence	Foundation seed of paddy Distributed	2	Metric Ton	4.15	4.20	4.20	4.20	4.30	4.32	4.45
7. Popularize the use of organic fertilizer, green fertilizer and microbial fertilizer among the farmers	Heaps prepared at farmers' homesteads	3	No. Lakh	7.50	7.55	7.60	7.60	6.0	6.50	6.52
	Green fertilizer Exhibitions conducted		Number (in thousands)	6.20	6.878	6.30	6.30	6.40	6.50	6.55

6.2.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects

(Taka in Thousands)

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
General Activity							
1430201 - Head Office, Department of Agricultural Extension	1-7	111,90,25	87,69,59	79,22,49	122,51,71	101,03,52	104,32,24
1430202 - Offices of the Additional Director, Department of Agricultural Extension (DAE)	1-7	106,12,58	16,02,17	19,11,21	17,83,57	18,64,80	19,35,41
1430203 - Offices of the Deputy Director, Department of Agricultural Extension (DAE)	1-7	0	111,21,16	81,68,57	115,77,02	121,17,33	126,21,66
1430204 - Offices of the Upazila Agricultural Officer	1-7	933,21,28	1066,35,23	1053,32,84	1210,36,64	1279,31,00	1338,36,72
1430205 - Offices of the Metropolitan Thana Agricultural Officer	1-7	0	12,61,90	14,02,79	14,36,57	13,74,50	14,35,07

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
1430206 - Horticulture Centres, Department of Agricultural Extension	1-7	0	75,96,54	84,89,68	70,10,02	75,80,25	78,35,55
1430207 - Plant Quarantine Stations, Department of Agricultural Extension	1-7	0	13,18,42	16,61,07	14,18,95	14,84,11	15,36,79
1430208 - Agricultural Training Institutes	1	39,85,05	38,03,73	42,90,84	39,31,52	41,63,75	43,19,90
Total : General Activity		1191,09,16	1421,08,74	1391,79,49	1604,46,00	1666,19,26	1739,53,34
Special Activity							
120007600 - Examination Expense Management	1-7	0	3,01,80	3,01,80	0	0	0
Total : Special Activity		0	3,01,80	3,01,80	0	0	0
Total : Operating Activities		1191,09,16	1424,10,54	1394,81,29	1604,46,00	1666,19,26	1739,53,34
Development Activities							
Non-Annual Development Program							
213026700 - Palm, Date, Beetle nut and neem Cultivation Extension Program for conservation of Eco-friendly trees at the verge of extinction	1-7	0	82,50	82,50	0	0	0
213026800 - Safe beetle leaf production technology Extension Program	1-7	0	2,95,00	2,95,00	3,20,00	0	0
213026900 - BARI developed four crop-based cropping pattern technology Extension Program	1-7	0	1,94,70	1,94,70	82,88	0	0
213027000 - Socio-economic progresss through inter cultural management of existing orchards in Chattogram Hilltract & improving orchards productivity	1-7	0	1,10,00	1,10,00	1,10,00	0	0
213027100 - Addressing nutritional demand and Socio-economic development of farmer of Chattogram Hilltract by establishing mixed gardening	1-7	0	68,00	68,00	50,00	0	0
213027200 - Expansion of Maize, Sweet Gourd and Ground nut Cultivation in char areas of Kurigram, Sherpur & Jamalpur districts	1-7	0	1,26,44	1,26,44	1,26,44	0	0
213027300 - Madaripur Horticulture Centre Development Program	1-7	0	5,92,21	5,92,21	1,27,85	0	0
Total : Non-Annual Development Program		0	14,68,85	14,68,85	8,17,17	0	0
Annual Development Program							
224063800 - Establishment of Farmers Service Centre and Technology Trasfer Union Level Pilot Project (01/07/2016 - 30/06/2018)	1-3, 5,7	1,85,89	29,70,00	24,00,00	13,03,00	0	0
224063900 - Argo-Meteorological Information Systems Development Project (Component-C) (01/07/2016-30/06/2021) Approved	2	0	80,56,00	56,18,00	13,64,00	41,80,00	0
224067100 - National Agricultura Technology Program Phase-2 Project (NATP-2) (DAE Part) 01/10/2015-30/09/2021	1-7	20,90,25	133,06,00	152,26,00	133,10,00	74,12,00	18,88,00
224067200 - Strengthening Phytosanitary Capacity in Bangladesh (01/07/2012 - 30/06/2018)	1-7	35,01,06	3,83,00	34,45,00	0	0	0
224067300 - Enhancement of Crop Production Through Farm Mechanization (Phase-2) (01/07/2013 - 30/06/2019)	1-7	82,91,19	78,22,00	78,22,00	0	0	0
224067400 - Agricultural Support for Smallholders in south-western Region of Bangladesh (DAE Part) (01/07/2013 - 30/06/2019)	1-7	20,18,41	10,32,00	8,68,00	0	0	0
224067500 - Transfer of Technology for Agriculture Production under Blue Gold Program (DAE Component) (01/01/2013 - 31/12/2020)	1-7	38,19	2,29,00	2,70,00	1,85,00	1,94,00	32,00
224067900 - Enhancement of Crop Production Through Improved On-Farm Water Management Technologies (01/07/2013 - 30/06/2018)	3	8,75,34	15,83,00	15,43,00	18,58,00	0	0
224068200 - Agricultural Support for Smallholders in south-western Region of Bangladesh (LGED Part) (01/07/2013 - 30/06/2019)	3	20,31	23,12,00	23,34,00	0	0	0
224068300 - Integrated Farm Management Component (IFMC) Agriculture Growth and Employment Program (AGEP) (01/07/2013 - 31/12/2018)	1-7	24,61,51	37,08,00	31,92,00	0	0	0

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
224068400 - Integrated Agricultural Approach for Ensuring Nutrition and Food Security Project (DAE Phase) (01/07/2014 - 30/06/2019)	1-7	24,89,58	22,00,00	22,00,00	6,62,00	0	0
224068500 - Increasing Cropping Intensity in Sylhet Region Project (DAE Part) (01/03/2015 - 30/06/2019)	1-7	11,40,10	16,25,00	16,25,00	0	0	0
224068600 - Year Round Fruit Production for Nutrition Improvement Project (01/07/2015 - 30/06/2020)	1-7	55,86,77	78,00,00	72,50,00	45,34,00	25,95,00	0
224117502 - Research Extension and popularization of Vegetables and Spices Cultivation on Floating Bed (BARI Part) Project (DAE Part) (July, 2017 to June, 2022)	7	0	4,62,00	4,62,00	5,82,00	6,30,00	6,05,00
224142901 - Development and expansion of bio-rational based integrated pest management technologies of vegetables, fruits and betel leaf (DAE Part)	1-7	0	2,57,00	2,57,00	2,78,00	2,10,00	75,00
224143000 - Enhancing Crop Production through Extension of Solar Energy and Modern Water Saving Technologies (Pilot)	1-7	0	13,54,00	9,87,00	10,00,00	12,70,00	11,65,00
224143100 - Production, Storage and Distribution of Quality Seeds of Pulses, Oils and Spices at Farmers Level-3rd Phase	1-7	0	31,48,00	43,30,00	32,91,00	33,00,00	33,00,00
224188300 - Farmers Training at the upozilla level for transfer at Technology (3rd Phase) Project. (01/01/2018- 31/12/2022)	3	0	77,12,00	72,62,00	75,00,00	63,15,00	48,80,00
224239500 - Safe Horticultural Crop Production and Post Harvest Technology Transfer Project.	1-7	0	0	8,04,00	15,56,00	0	0
224239600 - Greater Kushtia and Jashore Region Agricultural Development Project.	1-7	0	0	7,69,00	10,00,00	8,80,00	8,55,00
224247400 - Urban Agricultural Production Support Project (Pilot Project)	1-7	0	0	2,30,00	3,36,00	2,87,00	0
224252400 - Gopalganj, Khulna, Bagerhat, Shatkhira and Pirojpur Agricultural Development Project (GKBSPADP) (DAE Part)	1-7	0	0	6,20,00	10,00,00	8,47,00	20,60,00
224257400 - Barishal, Patuakhali, Bhola, Jhalokathi, Borguna, Madaripur and Shariatpur Agricultural Development Project.	1-7	0	0	6,59,00	15,00,00	22,20,00	21,75,00
224257500 - Noakhali, Feni, Lakshmipur, Chattogram and Chandpur Agricultural Development Project	1-7	0	0	6,30,00	10,00,00	13,30,00	12,60,00
224262000 - Safe Crop Production Project through Eco friendly Approach.	1-7	0	0	5,76,00	20,00,00	33,40,00	37,25,00
224262600 - Capacity Development of Agriculture Training Institutes (CDATI) Project.	1-7	0	0	3,48,00	43,49,00	52,65,00	0
224263500 - Smallholder Agricultural Competitiveness Project (SACP) (DAE Part)	1-7	0	0	17,35,00	40,53,00	37,25,00	36,80,00
224263800 - Rangpur Division Agriculture and Rural Development Project (LGED Part)	1-7	0	0	23,00	30,23,00	70,00,00	98,00,00
224263900 - Rangpur division Agriculture and Rural Development Project.. (DAE Part..)	1-7	0	0	1,82,00	18,74,00	50,00,00	95,00,00
224285100 - Citrus Crops Extension, Management and Production Enhancement Project.	1-7	0	0	0	20,00,00	0	0
224285200 - Production, Storage and Distribution of Quality Seeds of Rice, Wheat & Jute at Farmers Level Through Modern Technology Project	1-7	0	0	0	20,00,00	0	0
Total : Annual Development Program		286,98,60	659,59,00	736,67,00	615,58,00	560,00,00	450,00,00
Total : Development Activities		286,98,60	674,27,85	751,35,85	623,75,17	560,00,00	450,00,00
Total :		1478,07,76	2098,38,39	2146,17,14	2228,21,17	2226,19,26	2189,53,34

6.3 Bangladesh Agriculture Development Corporation

6.3.1 Recent Achievements: The remarkable achievements for the last three years are: Production of 4.10 lacs MT seed of various crops, distribution of 3.80 lac MT of the same, production of 281.53 lacs pieces of seedling and cuttings, 7.147 MT of vegetables and fruits, import of 33.86 lac MT of non-urea fertilizer and distribution of 30.03 lac MT of the same. Construction of 10 nos. of cold storages for potato seeds, 17 nos.

pre-fabricated steel godown (fertilizer), 6 nos. of rubber dam, re-excavation of 1225 kms canal, establishment of 221 km Surface irrigation channels and 1216.64 kms buried irrigation channels, 1577 LLP (power pump), 574 nos. of deep tube wells, rehabilitation of 509 nos. of deep tube wells, extension of 0.856 lac hectares of irrigation coverage and construction of 1631 nos. of various types of irrigation infrastructure.

6.3.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7	8	9	10	11
1. Increase the use of innovated varieties and technologies by farmers through training, publications and exhibitions-fairs-rallies-seminars-workshops	Persons trained	1	No. (in thousands)	15.852	16.832	16.00	15	16.50	16.8	17.1
	Seminar Workshop		No.	8	8	8	6	9	9	11
2. Ensuring the supply of fertilizers and other inputs at administered prices	Non-urea fertilizer distributed	2	Lakh Metric Ton	11.10	10.19	11.50	11.25	11.50	11.50	11.50
	Distributed TSP			3.00	3.27	3.00	3.75	3.75	3.75	3.75
	Distributed DAP			1.25	2.84	3.50	2.75	2.75	2.75	2.75
	Distributed MOP			4.75	4.08	5.00	7.75	5.00	5.00	5.00
3. Procurement of irrigation and other agricultural machineries and increasing their availability	Machinery items distributed	2	Number (in thousands)	0.650	0.650	0.650	0.250	0.350	0.400	0.450
	Rubber Dam constructed		Number	3	2	3	5	3	3	3
	Construction of surface and underground irrigation canals		k.m	139	187	120	350	475	450	425
4. Expansion of minor irrigation coverage by encouraging optimal use of surface water, and increasing the area of arable land by reducing water logging and sub-mergence	Expanded irrigation area	2	Lakh Hectare	0.206	0.206	0.20	0.215	0.22	0.23	0.24
	Increased arable land		Hectare (in thousands)		5.43	1.00	5.65	5.86	6.095	6.305
	Re-excavated canals		k.m	153	343.37	200	450	470	450	450
	Irrigation infrastructure constructed		Number	329	329	300	400	315	104	100
	Irrigated area	2	Lakh Hectare	-	5.43	-	5.65	5.86	6.095	7.00
5. Production, certification and distribution of breeder, foundation, certified and truthfully labelled seeds	Produced and distributed seeds	2	Lakh Metric Ton	1.26	1.26	1.2916	1.26	1.32	1.385	1.45
	Produced foundation seeds		M.T (Thousands)	16.97	14.698	20.00	17.00	20.50	21.00	21.50
	Produced Certified seeds			63.451	65.023	64.00	68.00	70.00	72.00	74.00
	Produced TLS			45.579	46.579	70.68	47.00	48.00	50.00	52.00
	Distributed foundation seeds			16.97	14.323	18.162	16.97	17.00	20.50	24.00
	Distributed certified seeds			63.451	63.451	65.00	63.451	68.00	70.00	72.00
	Distributed TLS			45.579	48.226	46.00	45.579	47.00	48.00	49.00
	Saplings produced		Number (lakh)	83.07	80.16	88.07	335.5	362.7	394.3	425.90
	Sapling distributed		Number (lakh)	83.07	80.16	88.07	335.5	362.7	394.3	425.9
	Vegetables and fruits produced		M.T (Lakh)	1.00	1.03	0.55	3.14	3.47	3.68	3.89
	Vegetables and fruits distributed			1.00	1.03	0.55	3.14	3.47	3.68	3.89
6. Production, certification and distribution of breeder, foundation and truthfully labelled	Produced and distributed seeds	2	Metric Ton (in thousands)	9.00	9.00	5.4	9	10	10	10

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
seeds tolerant to salinity, drought and water submergence	Produced tolerant varieties seeds		Metric Ton (in thousands)	9.00	9.00	5.4	10	10.00	10.00	10.00
	Distributed tolerant varieties seeds		Metric Ton (in thousands)	9.00	9.00	5.4	9	10	10	10
7. Meetings, seminars, fairs and technology exchange to encourage participation of the private sector in production and development of seeds	Arranged meeting/ seminar	2	Number	11	8	8	8	6	4	4

6.3.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects

(Taka in Thousands)

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
Support Activity							
133003200 - Bangladesh Agricultural Development Corporation.	1-7	551,97,93	583,30,60	547,65,27	536,93,39	532,67,77	527,93,07
Total : Support Activity		551,97,93	583,30,60	547,65,27	536,93,39	532,67,77	527,93,07
Total : Operating Activities		551,97,93	583,30,60	547,65,27	536,93,39	532,67,77	527,93,07
Development Activities							
Non-Annual Development Program							
213006100 - Removal of Water logging and Supplementary Irrigation Development Programme at Rawzan Upazila under Chattogram District	1-3	0	5,35,00	5,35,00	3,95,00	0	0
213006200 - Programme of Increasing Crop Production by using Surface Water at Bauphal Upazila under Patuakhali District	1-3	0	2,15,50	2,15,50	2,70,50	0	0
213006300 - Rehabilitation Programme of Deep Tube well and Low Lift Pump (LLP) in Dinajpur District affected by Recent Flood (August-2017)	1-3	0	2,91,50	2,91,50	2,11,50	0	0
213012800 - Programme for Plantation of Palm (Tal) Seeds in Barind Area	7	0	1,20,00	1,20,00	1,00,00	0	0
213020100 - Minor Irrigation Development Programme of Borkol & Kawkhali Upazilla under Rangamati District	3,4	13,06	2,96,06	2,96,06	0	0	0
213020400 - Minor Irrigation Development Programme of Kasba & Akhaura Upazilla under Brahmanbaria District	3,4	12,00	1,56,00	1,56,00	0	0	0
213020500 - Minor Irrigation Development Programme by Utilizing Surface Water of Chatmohar, Bhangura and Faridpur Upzila under Pabna District	3,4	7,70	2,73,00	2,73,00	0	0	0
213023500 - Development of High Yielding Climate Resilient Pulse, oil seed and cereal crop varieties through Agronomic Management for Nutritional Security	2	2,82,38	1,00,00	1,00,00	0	0	0
213026000 - Irrigation Extension Program in Fruit and Vegetable Garden using surface water with solar Powered Pump in Bandarban District	1-3	0	3,69,49	3,69,49	3,77,34	0	0
213026100 - Minor Irrigation Development Programme through surface water in Khagrachari Hilly Area using Renewable Energy	1-3	0	3,69,49	3,69,49	3,39,52	0	0
213026200 - Drip Irrigation Extension Program in Flowers and Vegetables using Dug Well & Solar Powered Pump in Jhekorgacha Upazila under Jashore District	1-3	0	2,96,00	2,96,00	2,47,00	0	0
213026300 - Veersreshtha Mohiuddin Jahanghir Union of Babuganj Upazila Minor Irrigation Development Programme under Barishal District	1-3	0	6,02,07	6,02,07	2,38,57	0	0

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
213026400 - Programme for Expansion of Irrigated Area at Different Char Area of Kurigram Sadar, Ulipur & Chilmari Upazila under Kurigram District Through Portable Irrigation Distribution System	1-3	0	4,25,80	4,25,80	3,25,40	0	0
213026500 - Programme for Removing Waterlogged area for Minor Irrigation Development at Subornochar Upazila under Noakhali District	1-3	0	4,77,50	4,77,50	3,10,70	0	0
213026600 - Establishment of Foundation Mother Tree Orchard (FMTO) through dwarf Vietnamese Dwarf Xiem Xanth (Green) and Dwarf Xiem Luc (Blue) Coconut Varieties and set up of Kerala hybrid Coconut demonstration Program	7	0	1,04,92	1,04,92	1,04,92	0	0
213032401 - Minor irrigation development program in Munshiganj district	1-7	0	0	0	2,81,96	2,56,46	0
213032701 - Programme for bank protection and increase the depth water storage capacity of constructed rubber dam at Chellakhali of Nalitabari Upazila in Sherpur District	1-7	0	0	0	2,52,50	4,02,70	0
Total : Non-Annual Development Program		3,15,14	46,32,33	46,32,33	34,54,91	6,59,16	0
Annual Development Program							
223012500 - Digitalization of Survey and Monitoring for Development of Minor Irrigation (Phase IV)	2	0	19,50,00	15,50,00	14,00,00	13,25,00	0
224064300 - Construction of Rubber Dams to Utilize Surface Water for Enhancing Agricultural Production Project. (01/01/2016 - 30/06/2020)	1-7	27,00,00	65,00,00	20,00,00	30,00,00	0	0
224065100 - Sylhet Division Minor Irrigation Development Project (01/10/2014 - 30/06/2019)	2	32,20,00	20,87,00	39,79,00	0	0	0
224065400 - Barishal Division Minor Irrigation Development Project (01/04/2015-30/06/2019)	2	24,40,00	22,17,00	22,17,00	15,21,00	0	0
224065600 - Modernization and Improvement of Existing Seed Production, Processing & Distribution Facilities of BADC (MIEF) Project. (01/04/2015 -30/06/2018)	1-7	100,00,00	37,82,00	44,72,00	1,00	0	0
224065700 - Increasing Cropping Intensity in Sylhet Region Project (BADC Part) (01/03/2015 - 30/06/2019)	1-7	2,49,00	58,00	58,00	0	0	0
224065900 - Improvement and Quality Seed Production of Rice, Wheat and Maize Project (2nd Phase) (01/07/2015 - 30/06/2020)	1-7	70,00,00	50,00,00	65,00,00	46,07,00	0	0
224066300 - Strengthening of Sustainable Nutrition Security through Pulse & Oil Seed Production Project (01/07/2015 - 30/06/2020)	1-5	25,00,00	40,00,00	40,00,00	29,03,00	0	0
224066400 - Expansion of Irrigation Through Utilization of Surface Water by Double Lifting (3rd Phase) Project. (01/07/2015 - 30/06/2020)	1-5	36,00,00	30,00,00	28,00,00	9,40,00	0	0
224066500 - Ashuganj-Polash Agro Irrigation Project (5th Phase) (01/07/2015 - 30/06/2020)	1-5	6,20,00	4,50,00	5,43,00	3,45,00	0	0
224117600 - Greater Khulna and Jashore District Minor Irrigation Development Project.	2-3	0	50,00,00	50,00,00	25,00,00	20,47,00	0
224117700 - Greater Bogura and Dinajpur District Minor Irrigation Development Project.	2-3	0	37,36,00	37,36,00	19,87,00	18,76,00	0
224143200 - Pilot Project of Surface Water Based Irrigation Expansion Model at Shaniajan Union of Hatibandha Upazila Under Lalmonirhat District.	2-3	0	10,40,00	10,35,00	12,62,00	0	0
224143300 - Noakhali, Feni and Laxmipur District Minor Irrigation Development Project	2-3	0	47,20,00	45,06,00	25,00,00	42,00,00	3,02,00
224188100 - Enhancing the Capacity of Horticulture Division of BADC by improvement of Nutritional Security with the Supply of Horticulture Product. (01/01/2018- 30/06/2022)	5-6	0	24,00,00	27,92,00	21,74,00	23,15,00	17,61,00
224188200 - Mymensingh Division and Tangail & Kishoregonj District Minor Irrigation Development Project. (01/01/2018- 30/06/2022)	2	0	41,60,00	41,60,00	25,00,00	400,00,00	8,60,00
224188400 - Minor Irrigation Development & Increase Irrigation Efficiency Through Conservation of Surface Water in Rangpur area (01/01/2018- 30/06/2022).	2	0	36,83,00	36,83,00	25,00,00	35,00,00	15,00,00

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
224188600 - Technical Feasibility Study Project for Establishment of Seed Production Farm in the Borochar of Meghna River under Matlab North Upazila in Chandpur District (01/03/2018-30/11/2018)	5-6	0	2,13,00	2,06,00	0	0	0
224242400 - Renovation, Modernization and Construction of office Buildings and Infrastructures of Bangladesh Agricultural Development Corporation (BADC) Project.	1-7	0	0	17,41,00	25,00,00	40,00,00	60,00,00
224255800 - Enhancing the Capability of Vegetable Seed Division , BADC by Strengthening Hybrid Vegetable Seed Production, Processing Preservation & Distribution Activities Project.	5-6	0	0	2,51,00	10,89,00	7,50,00	7,63,00
224257200 - Rehabilitation of Contract Growers of Chandpur Seed Potato Contract Growers Zone Affected by Natural Calamities and Increasing the Facilities for Procurement and Processing of Seed Potato Project.	5-6	0	0	1,48,00	7,25,00	2,62,00	0
224262300 - Minor Irrigation Development Project by using Solar Energy	1-7	0	0	7,78,00	11,46,00	27,05,00	15,74,00
224263600 - Smallholder Agricultural Competitiveness Project (SACP) (BADC Part)	1-7	0	0	12,13,00	85,43,00	284,99,00	517,40,00
224264200 - Greater Dhaka District Irrigation Area Development Project (3rd Phase)	1-7	0	0	7,00,00	15,00,00	0	0
Total : Annual Development Program		323,29,00	539,96,00	580,68,00	456,43,00	914,79,00	645,00,00
Total : Development Activities		326,44,14	586,28,33	627,00,33	490,97,91	921,38,16	645,00,00
Total :		878,42,07	1169,58,93	1174,65,60	1027,91,30	1454,05,93	1172,93,07

6.4 Bangladesh Rice Research Institute

6.4.1 Recent Achievements: During the last three years (2015-16 to 2017-18), total 20 high yielding varieties of rice have been developed and released. Amongst them are 1 basmati type long slender-fine, 1 long slender-fine export quality, 2 zinc enriched and 1 medium blast resistance Boro; 2 salinity resistant, 2 aromatic, 3 tidal, 1 drought resistant, 1 zinc enriched and 1 hybrid Aman; 1 drought resistant Broadcast. Aus, 1 short duration Nerica type and 1 water stagnant Transplant. Aus. Besides, 1 USG applicator and 1 solar light trap have been innovated. 512.00 MT breeder seeds have been produced and supplied to more than 500 governments, private, NGOs and individual entrepreneurs connected with the seed production-network. To facilitate technology transfer, training has been provided to 17,200 farmers, agricultural workers, and officials, 17,000 field demonstration, 162 seminar/workshops, 86 fairs/ rally have been organized. 300 field demonstrations have been organized to popularize the innovated agricultural machineries of BRRI. 1.70 lakh copies of 11 reports on modern paddy cultivation, rice journals, annual research reports and booklets have been published by BRRI.

6.4.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
1. Innovation of high yielding varieties of different crops, and technologies.	Innovate varieties of paddy and other crops	1	Number	3	2	3	2	5	2	2
	Innovate/develop agriculture technologies			3	3	3	7	9	2	2
2. Innovation of technologies and nutrient enriched varieties of rice and other crops tolerant to salinity, drought and water submergence and other adverse conditions	Innovate rice varieties	1	Number	2	2	2	2	2	2	2
	Innovate rice technologies	1	Number	2	2	2	2	2	2	2

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
3. Increase the use of innovated varieties and technologies by farmers through training, publications and exhibitions-fairs-rallies-seminars-workshops	Trained Persons/ Farmers	1	Number (in thousands)	4.50	4.50	5.00	5.00	5.50	5.50	5.50
	Transferred technologies at field level			5	5	3	3	3	3	3
	Demonstration established		Number (in thousands)	6.00	6.00	6.50	6.50	6.60	6.60	6.60
	Seminar/ workshop arranged		Number	50	50	50	50	50	50	50
	Varieties transferred at field level		Number	5	5	3	3	3	3	3
	Extension officer/staffs		Number (in thousands)	1.00	1.00	1.00	1.10	1.20	1.20	1.20
	Innovation of agriculture machineries/ develop		Number	1	1	1	1	1	1	1
	Number of publicity		Number	10	10	10	10	10	10	10
4. Providing e – agriculture information service	Persons benefited	1	Number (Lakh)	3.00	3.00	3.00	3.00	3.00	3.00	3.00
5. Production, certification and distribution of breeder, foundation, certified and truthfully labeled seeds	Breeder seeds produced	2	M.T	100	100	100	100	100	100	100
	Truthfully labelled seed produced			30	30	30	30	30	30	30
	Breeder seeds distributed			100	100	100	100	100	100	100
	Truthfully labelled seeds distributed			30	30	30	30	30	30	30
6. Production, certification and distribution breeder, foundation and truthfully level seeds tolerant to salinity, draught and water submergence and other conditions	Produced adverse resistant seeds	2	Metric Ton)	25	25	25	25	25	25	25
	Distributed adverse resistant I seeds			25	25	25	25	25	25	25

6.4.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects

(Taka in Thousands)

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
Support Activity							
131014700 - Bangladesh Rice Research Institute	1-6	93,25,44	105,94,91	105,76,66	106,87,00	109,95,81	112,21,28
Total : Support Activity		93,25,44	105,94,91	105,76,66	106,87,00	109,95,81	112,21,28
Total : Operating Activities		93,25,44	105,94,91	105,76,66	106,87,00	109,95,81	112,21,28
Development Activities							
Non-Annual Development Program							
213027900 - Strengthening Existing Research Activities of Mujibnagar Integrated Agricultural Development Project	1-2	0	38,00	38,00	38,00	0	0
213028000 - Agronomy Laboratory Modernization of Bangladesh Rice Research Institute (BRRI)	1-2	0	1,29,40	1,29,40	1,19,30	0	0
213028100 - Modernization of Entomology Laboratory to Increase Rice Yield	1	0	3,51,45	3,51,45	96,60	0	0
Total : Non-Annual Development Program		0	5,18,85	5,18,85	2,53,90	0	0

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Annual Development Program							
224063600 - Strengthening Physical Infrastructure and Research Activities of Bangladesh Rice Research Institute (01/01/2016 - 30/06/2020)	3,4	23,00,00	70,00,00	70,00,00	70,72,00	20,00,00	25,00,00
Total : Annual Development Program		23,00,00	70,00,00	70,00,00	70,72,00	20,00,00	25,00,00
Total : Development Activities		23,00,00	75,18,85	75,18,85	73,25,90	20,00,00	25,00,00
Total :		116,25,44	181,13,76	180,95,51	180,12,90	129,95,81	137,21,28

6.5 Bangladesh Agricultural Research Institute

6.5.1 Recent Achievements: During the last three years (2015-16, 2016-17, 2017-18), 71 varieties of different crops such as wheat, maize, tuber crops, vegetables, fruits, flowers, pulses, oilseeds and spices were developed of which 12 varieties are drought and 3 varieties are salt tolerant. Moreover, 1040 germplasms of those crops were collected. Besides, 60 technologies have been developed on soil, fertilizer and water management, disease and insect pest management, crop intensification with new cropping patterns, post-harvest handling, processing and transportation of crops, and 9 agricultural machineries for mechanized agriculture. A total of 49,500 persons, who are scientists, extension and NGO personnel and farmers were trained up. Moreover, 7,500 persons were informed about the developed technologies through 150 nos. seminar, symposium and workshops. For the dissemination of technology, 60 publications were made and 8,000 demonstration blocks were set up. In spite of these, 3000 m.ton seeds (Breeder and TLS) of BARI developed varieties were produced and distributed among the farmers, government, NGO and other entrepreneurs. Among them, 135 m.ton seeds were for unfavorable eco-system. Moreover, 30 lakh nos. seedling/sapling/cutting were produced and distributed among the farmers, government, private, NGOs and entrepreneurs. Eighty television programs on BARI mandated crops and developed technologies were recorded and telecasted several times for mass communication. During this period, memorandum of understanding (MOU) was signed with 21 organizations for bilateral cooperation.

6.5.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18	2018-19	2018-19	2018-19	2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
1. Innovation of high yielding varieties of different crops, and technologies	Innovated varieties	1	Number	22	22	22	20	20	20	21
	Innovated technologies			25	20	21	47	42	42	43
2. Increase the use of innovated varieties and technologies by farmers through training, publications and exhibitions-fairs-rallies-seminars-workshops	Training provided	1	Batch (Number)		430	670	340	350	350	350
			Person (in thousands)	15	15	15.100	10	11	11	11
3. Providing e-agriculture information service	Benefited farmer	1	Persons in Thousands	100	100	110	100	110	115	120
4. Production, certification and distribution of breeder, foundation, certified and truthfully level seeds	Breeder and truthfully labeled I seeds Produced and distributed	2	Metric ton (in thousands)	1.00	1.00	1.00	0.90	0.90	0.92	0.95
5. Production and distribution of breeder, foundation, certified and truthfully seeds of rice, wheat and other crops tolerant to salinity, drought and water submergence and other adverse conditions	Produced breeder and truthfully labelled seeds	2	M.T	45	45	45	45	45	45	45
6. Meetings, seminars, fairs and technology exchange to encouraging the participation of the private sector in production and development of seeds	Memorandum of Understanding signed with private entrepreneurs	2	Number	8	8	8	8	8	8	8

6.5.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects

(Taka in Thousands)

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
Support Activity							
131014800 - Bangladesh Agriculture Research Institute	1-6	281,45,05	259,79,54	253,20,69	256,46,00	267,72,44	277,87,54
Total : Support Activity		281,45,05	259,79,54	253,20,69	256,46,00	267,72,44	277,87,54
Total : Operating Activities		281,45,05	259,79,54	253,20,69	256,46,00	267,72,44	277,87,54
Development Activities							
Non-Annual Development Program							
213006400 - Programme for the Production of Onion Breeder Seed	1-2	0	92,20	92,20	45,00	0	0
213012700 - Programme for the Processing and Preservation of Green Mango	1-2	0	30,63	30,63	23,98	0	0
213020000 - Problem Identification & Research Based Programme on Newly Released Potato and Vitamin Rich Sweet Potato Breeder Seed Production by Conducting Demonstration	2,3,6	74,43	1,97,00	1,97,00	0	0	0
213028200 - Khesari, Black gram, Felon Variety development, Seed Production and Post harvest technology innovation and dissemination program	1-2	0	1,52,00	1,52,00	1,10,00	0	0
213028300 - Program on varietal improvement and technology development research of black pepper, black cummin with other nonconventional spice crops	1	0	2,41,75	2,41,75	90,75	0	0
213028400 - Processing and Preparation of Vegetable Meat from Green Jackfruit	1-6	0	3,07,25	3,07,25	1,27,90	0	0
213028500 - Improvement of local mango variety, development of production and distribution of mother prop gules of BARI developed promising varieties	2	0	2,90,00	2,90,00	2,10,00	0	0
213028600 - Development and extension to four crop based cropping pattern to increase cropping intensity program	1-2	0	1,40,00	1,40,00	1,50,00	0	0
213028700 - Strengthening of non conventional oil crops research (soybean, sunflower and linseed)	1	0	1,45,00	1,45,00	1,40,00	0	0
Total : Non-Annual Development Program		74,43	15,95,83	15,95,83	8,97,63	0	0
Annual Development Program							
224063500 - Strengthening Research on Horticultural Crops and Dissemination of Horticultural & Field Crop Technology at Charland Areas (01/04/2016 - 30/06/2021)	1-5	12,08,00	15,05,00	14,19,00	10,88,00	15,50,00	0
224064100 - Improvement and Quality Seed Production of Wheat and Maize 2nd Phase (01/07/2015 - 30/06/2020)	1-5	7,90,00	4,44,00	3,15,00	4,12,00	0	0
224064200 - Strengthening of Oil-seed and Pulses Research and Development. (01/04/2016 - 30/06/2021)	1-5	7,34,00	4,20,00	2,96,00	3,73,00	2,38,00	0
224117501 - Research Extension and popularization of Vegetables and Spices Cultivation on Floating Bed (BARI Part) Project (July, 2017 to June, 2022)	1-2	0	11,60,00	11,51,00	6,14,00	6,06,00	7,80,00
224149020 - Development and expansion of bio-rational based integrated pest management technologies of vegetables, fruits and betel leaf (BARI Part)	1-2	0	9,27,00	8,67,00	5,56,00	2,52,00	1,55,00
224188500 - Strengthening of Spices Research in Bangladesh (01/10/2017- 30/06/2022)	1	0	20,70,00	20,37,00	23,72,00	23,00,00	19,80,00
224256100 - Establishment of Agriculture Research Station, BARI, Gopalganj and eco-friendly agricultural development Project in south western part through strengthening of research.	1-6	0	0	1,30,00	103,72,00	29,72,00	35,17,00
224263400 - Smallholder Agricultural Competitiveness Project (SACP) (BARI Part)	1-6	0	0	43,00	4,34,00	82,00	68,00

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
224277000 - Upgrading Regional Horticulture Research Station Cumilla to Regional Agricultural Research Station.	1-6	0	0	42,00	11,50,00	0	0
Total : Annual Development Program		27,32,00	65,26,00	63,00,00	173,71,00	80,00,00	65,00,00
Total : Development Activities		28,06,43	81,21,83	78,95,83	182,68,63	80,00,00	65,00,00
Total :		309,51,48	341,01,37	332,16,52	439,14,63	347,72,44	342,87,54

6.6 Bangladesh Jute Research Institute

6.6.1 Recent Achievements: Four high yielding varieties jute and allied fibre crops (deshi jute-1, tossa jute-1, kenaf-1 and mesta-1) have been developed in last three years (2015-16 to 2017-18). Two advanced breeding lines of deshi jute Shoshi-1, Shoshi-2 and two advanced breeding lines of tossa jute, Robi-1, Robi-2, have been developed. In order to secure intellectual property right of jute genome information, 7 patent application had been filed in different countries of the world including Europe and America. Out of which recognition of 6 patents have been received from different countries including America, Australia, Japan, South Africa, Hong Kong, Malaysia and Europe. Training has been provided to 11350 jute farmers, extension workers and jute goods producers to disseminate agricultural and industrial technologies. In last three year, 4500 kg breeder seeds and 14 tons truthfully labeled seeds have been produced and distributed to BADC and other private organizations, and farmers level. Six jute goods technologies have been developed including jute-plastic composite, jute-cotton-sheep wool blended blanket, different kinds of jute based textile products by blending jute with cotton. Jute geo textile has been included in the schedule of LGED, Water Development Board and PWD for commercial use as important construction material in specified areas (rural road construction, river bank protection and hill slope management).

6.6.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
1. Innovation of high yielding varieties of different crops, and technologies.	Innovated new varieties of jute	1	Number	3	3	1	1	2	2	2
	Innovated technology			5	5	5	3	8	9	9
2. Increase the use of innovated varieties and technologies by farmers through training, publications and exhibitions-fairs-rallies-seminars-workshops	Persons/farmers Trained	1	Number (in thousands)	4.40	2.15	2.00	1.50	1.50	1.50	150
	Extensions employee trained		Number	930	200	250	120	150	180	200
	Report, bulleting, leaflet booklet, newsletters etc. published		Number	10	8	12	10	10	12	12
3. Production, certification and distribution of breeder, foundation, certified and truthfully labeled seeds	Produced breeder seeds	2	Kilogram (in thousands)	1.50	1.50	1.80	1.50	1.60	1.80	200
	Produced truthfully labeled seeds		Metric ton	10	10	12	12	14	15	15
4. Production, certification, preservation and distribution of seeds of rice, wheat and other crops tolerant to adverse conditions like salinity, drought, water submergence and others	Breeder seeds produced	2	kg	60	60	60	60	60	60	60
	Truthfully labelled seeds distributed			220	220	220	220	240	260	260
5. Meetings, seminars, fairs and technology exchange to encouraging the participation of the private sector in production	Memorandum of understanding signed	2	Number	2	2	2	2	2	2	2
	Fairs participated			8	8	8	8	9	10	10

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
and development of seeds	Arranged meeting-seminars			10	10	10	10	12	15	15

6.6.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects

(Taka in Thousands)

Name of the Institutional Unit/Scheme/Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
Support Activity							
131015200 - Bangladesh Jute Research Institute (BJRI)	1-5	44,17,60	45,12,65	45,12,65	48,16,00	54,57,40	55,07,40
Total : Support Activity		44,17,60	45,12,65	45,12,65	48,16,00	54,57,40	55,07,40
Total : Operating Activities		44,17,60	45,12,65	45,12,65	48,16,00	54,57,40	55,07,40
Development Activities							
Annual Development Program							
224067000 - Fundamental and Applied Research on Jute (01/09/2010-30/06/2018)	1	12,76,00	8,18,00	7,15,00	1,00	0	0
224143401 - Research Strengthening of Jute and Textile Product Development Center (JTPDC) of BJRI Project.	1	0	17,20,00	10,60,00	9,68,00	36,00	0
224250900 - Establishment of Jute Research Sub-Station and strengthening of research activities at Madarganj of Jamalpur district.	1-5	0	0	4,33,00	13,48,00	21,64,00	15,00,00
Total : Annual Development Program		12,76,00	25,38,00	22,08,00	23,17,00	22,00,00	15,00,00
Total : Development Activities		12,76,00	25,38,00	22,08,00	23,17,00	22,00,00	15,00,00
Total :		56,93,60	70,50,65	67,20,65	71,33,00	76,57,40	70,07,40

6.7 Bangladesh Institute of Nuclear Agriculture (BINA)

6.7.1 Recent Achievements: During the last three years, Bangladesh Institute of Nuclear Agriculture (BINA) has released 20 high yielding varieties of different crops such as: four varieties of rice, one variety of wheat, one variety of chili, one variety of garlic, one variety of mungbean, one variety of soybean, one variety of sesame, two varieties of lentil, three varieties of tomato, two varieties of chickpea, two varieties of onion and one variety of citrus fruit (2015-16: Binadhan-17, Binadhan-18, Binatomato-11, Binatomato-12, Binasola-9, Binasola-10, Binatill-4, Binamasur-10; 2016-17: Binadhan-19, Binagom-1, Binarasun-1, Binasoysbean-5, Binamasur-11, Binamoog-9, Binamorich-1; 2017-18: Binadhan-20, Binapiaj-1, Binapiaj-2, Binalebu-1, Binatomato-13). Fertilizer requirement dose has been determined for higher production of different crops. Besides, 525.64 Metric ton Breeder seed, Truthfully labelled seeds have been produced and 485.95 Metric ton seeds have been distributed among the farmers of BINA developed 102 varieties. 6140 blocks and experimental demonstrations were set up at 45 different districts of the country. 8310 farmers, 1950 officers and staffs of DAE, BADC and NGO's were trained by BINA. A total of 1,15,000 copies of leaflets, booklets and BINA profiles were published. 15 non-commodity technologies about soil management, bio-fertilizer production, insect and diseases management, irrigation and water management, crop management and on farm research were developed.

6.7.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
1. Innovation of high yielding varieties of different crops, and technologies	Innovated varieties	1	Number	4	4	5	2	5	5	5
	Innovated technologies			4	4	4	2	5	5	6
2. Innovation of technologies	Innovated	1	Number	1	1	1	1	1	1	1

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
and varieties of rice and other crops tolerant of salinity, drought and water submergence and other adverse conditions	varieties)									
	Innovated technologies			1	1	1	1	1	1	1
	Innovated microbial fertilizer					1	0	0	0	0
3. Increase the use of innovated varieties and technologies by farmers through training, publications and exhibitions-fairs-rallies-seminars-workshops	Persons/farmers trained	1	Person (in thousands)	2.8	2.95	3.00	3.00	3.00	3.00	3.20
	Extensions officers trained		Number (in persons)	900	800	500	500	500	500	600
	Exhibition set		Number (Thousands)	1.60	1.70	1.70	1.80	1.90	1.90	2.00
	Workshop/seminar organized		Number	28	35	30	30	30	32	33
	Varieties transferred to DAE			2	2	2	5	5	5	6
	Technologies transferred to DAE			2	2	2	2	2	2	3
	Varieties transferred at field level			10	12	10	10	12	12	13
	Technologies transferred at field level			2	2	2	2	2	2	2
4. Production, certification and distribution of breeder, foundation, certified and truthfully level seeds	Breeder seeds produced	2	Metric ton	28	31.64	29	32.00	32.00	32.00	33.00
	Truthfully labelled seeds produced			30	32.25	32	32	33	34	35
	Breeder seeds distributed			27	31.09	28	31	32	31	32
	Truthfully labelled seeds distributed			29	32.22	30	31.00	32	33	34
5. Production, certification and distribution of breeder, foundation and truthfully labeled seeds tolerant to salinity, draught and water submergence	Tolerant of adverse condition seeds produced	2	Metric ton	22	23.64	23	25	25	23	24
	Tolerant of adverse condition seeds distributed			21	23.50	22	24	24	25	26
6. Popularizing the use of organic fertilizer, green fertilizer and microbial fertilizer among the farmers	Micro-bio fertilizer produced and distributed	3	Metric ton	0.500	0.504	0.500	0.500	0.500	0.500	0.550

6.7.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects

(Taka in Thousands)

Name of the Institutional Unit/Scheme/Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
Support Activity							
131015100 - Bangladesh Institute of Nuclear Agriculture	1-6	30,65,51	41,57,50	41,57,50	45,64,00	53,90,80	57,86,67
Total : Support Activity		30,65,51	41,57,50	41,57,50	45,64,00	53,90,80	57,86,67
Total : Operating Activities		30,65,51	41,57,50	41,57,50	45,64,00	53,90,80	57,86,67

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Development Activities							
Non-Annual Development Program							
213020200 - Development of Climate Resilient Crop and Fruit Varieties	1,2,5	38,00	2,22,50	2,22,50	0	0	0
213023400 - Enhancing income of the farmers and improving environment in the coastal area through extension of dwarf variety coconut programe	2,5	2,39,00	1,03,84	1,03,84	0	0	0
213028900 - Development of Crop Varieties and Management Technologies for Haor, Charland, Southern and Barind and Adaptation Programme	1	0	2,05,00	2,05,00	1,25,00	0	0
Total : Non-Annual Development Program		2,77,00	5,31,34	5,31,34	1,25,00	0	0
Total : Development Activities		2,77,00	5,31,34	5,31,34	1,25,00	0	0
Total :		33,42,51	46,88,84	46,88,84	46,89,00	53,90,80	57,86,67

6.8 Bangladesh Sugarcane Research Institute

6.8.1 Recent Achievements: During the last three years (2015-16 to 2017-18) two sugarcane varieties, BSRI Akh 45 and BSRI Akh 46, have been released. Two varieties of tropical sugarbeet., BSRI Sugarbeet 1 and BSRI Sugarbeet 2, have been registered. A year round fruit bearing palmyra palm variety BSRI Tal 1 and a Stevia variety viz., BSRI Stevia 1 of sweetener crop have also been registered. Advanced agronomic management technology of sugarcane has been developed. Fertilizer management technology of sole cane, intercrop and ratoon for whole country have been standardized and recommended. Five agricultural tools and farm machineries have been developed including BSRI improved cane crusher for cane crushing, Paired-row trencher for cane cultivation and power weeder for efficient weeding. Sugarbeet research has been completed in 22 different areas of Bangladesh including salinity prone areas. Nipa virus free date palm juice extraction technology has been developed. 1,50,000 seedlings of date palm and 30,000 seedlings of palmyra palm have been planted around the country. Furthermore, 10,000 ton disease free clean seed of sugarcane have been distributed among the sugarcane growing farmers all over the country.

6.8.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
1. Innovation of high yielding varieties of different crops, and technologies	Innovated varieties developed	1	Number	2	2	1	-	1	1	1
	Demonstration		No.	335	335	340	340	345	350	.55
	Innovated technologies		No	6	6	7	5	6	7	7
2. Increase the use of innovated varieties and technologies by farmers through training, publications and exhibitions-fairs-rallies-seminars-workshops	Trained farmers	1	Person (In thousands)	2.1	2.1	2.2	2.2	2.4	2.6	2.8
	Trained (Extension officer/Staffs)		Number	650	650	650	650	650	650	650
	Seminar/workshop arranged			13	13	14	14	15	16	17
	Varieties transferred at field level			1	1	2	1	1	1	1
	Technologies transferred at field level			6	6	7	6	7	8	9
3. Production, certification and distribution of breeder, foundation, certified and truthfully labeled seeds	Seeds produced	2	Metric ton	1936	1936	2408	2146	2408	2880	3352
	Seed distributed			1936	2000	2408	2146	2408	2880	3352

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
4. Production, certification, preservation and distribution of breeder, foundation and truthfully labelled seeds with adaptability to adverse environment (salinity, draught and water submergence)	Produced seeds	2	Metric ton	200	200	250	250	300	350	400
	Distributed seeds		Metric ton	200	200	250	250	300	350	400

6.8.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects

(Taka in Thousands)

Name of the Institutional Unit/Scheme/Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
Support Activity							
131015300 - Bangladesh Sugarcane Research Institute	1-4	28,20,20	31,19,73	31,19,73	34,03,00	35,35,80	36,72,10
Total : Support Activity		28,20,20	31,19,73	31,19,73	34,03,00	35,35,80	36,72,10
Total : Operating Activities		28,20,20	31,19,73	31,19,73	34,03,00	35,35,80	36,72,10
Development Activities							
Non-Annual Development Program							
213027400 - Development & Expansion of Integrated Pest Management of Sugarcane and sugarbeet insects in Changing Climate Condition	1-2	0	64,40	64,40	66,40	0	0
213027500 - Expansion of Chewing cane Cultivation in Southern Coastal Region in Changing Climate Condition	1-5	0	33,40	33,40	29,10	0	0
Total : Non-Annual Development Program		0	97,80	97,80	95,50	0	0
Annual Development Program							
224066000 - Strengthening Integrated Research Facilities of Bangladesh Sugarcane Research Institute (01/07/2015 - 30/06/2020)	1	16,00,00	8,00,00	9,68,00	13,27,00	0	0
Total : Annual Development Program		16,00,00	8,00,00	9,68,00	13,27,00	0	0
Total : Development Activities		16,00,00	8,97,80	10,65,80	14,22,50	0	0
Total :		44,20,20	40,17,53	41,85,53	48,25,50	35,35,80	36,72,10

6.9 Barendra Multipurpose Development Authority

6.9.1 Recent Achievements: During the last three years (2015-16 to 2017-18) 21500 hectares of land has come under controlled irrigation by installing 723 deep tubewells and low lift pumps, electrifying 697 irrigation equipments, and by constructing 1986 km buried pipe lines. BMDA has also activated 419 numbers of unserviceable deep tube well. BMDA has re-excavated 516.85 km canal, 128 derelict ponds, excavated 182 dug well, constructed 1 rubber dam and also constructed 89 submerged weirs across the canal to conserve surface water which cover supplementary irrigation of about 65250 hectares of land. BMDA has produced 1815 M.T seed and distributed to the farmers. A number of 6550 farmers were also trained in this regard. BMDA planted 8.12 lac fruits, medicinal and forest trees last three years. BMDA has constructed 199.00 km rural road and repair 39.00 km also. Besides these BMDA operated about 15842 deep tube wells per year which cover 5.03 lac hectares of land.

6.9.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
1. Increase the use of innovated varieties and technologies by farmers through training, publications and exhibitions-fairs-rallies-seminars-workshops	farmers trained	1	No. (In thousands)	-	2.35	2.50	1.25	1.00	0.50	0.50
	Transferred Alternate wetting and drying (AWD)		Plot in Hectare	20	22	20	20	20	20	20

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
	technology									
2. Procurement of irrigation and other agricultural machineries and increasing their availability.	Deep tube well installed and connected to electricity	2	Number	15615	15842	15710	15887	15897	16097	16147
	Irrigation canal constructed		Kilometer	130	708	14	170	10	100	150
	Expanded irrigation area		Hectare (In thousands)	3.00	0.032	3.00	1.25	3.00	2.00	2.50
	Deep tube well used		Number in thousands	15.615	15.842	15.710	15.887	15.897	16.097	16.147
	irrigation area coverage		Number in lac	4.88	5.03	4.92	5.20	5.205	5.21	5.22
	Expanded agriable land		Hectare (In Thousand)	0.75	7.75	2	0.75	0.30	0.50	0.60
3. Expansion of minor irrigation coverage by encouraging optimal use of surface water, and increasing the area of arable land by reducing water logging and sub-mergence	Re-excavated canal	2	km	130	130.3	14	13	15	225	250
	Cross dams constructed		no	16	5	2	2	0	5	10
	Ponds re-excavated		No	23	21	0	0	0	50	100
	Dug well excavated		No	68.00	23	690	100	147	50	50
	Use of power pumps		No	15615	15842	15710	15887	15897	16097	16147
	Area covered under complementary irrigation		Hectare (Thousands)	68.00	120	69.00	68	68	70.00	72.00
4. Production, certification and distribution of breeder, foundation and truthfully labelled seeds	Breeder, certificated and truthfully labelled seeds production and preservation	2	M.T	600	600	600	600	600	600	600
	Seeds distributed	2	M.T	600	600	600	600	600	600	600

6.9.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects

(Taka in Thousands)

Name of the Institutional Unit/Scheme/Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Annual Development Program							
224063700 - Excavation of Dug-well in Barinda Area for cultivation of crops by soft Irrigation Project. (01/07/2016 - 30/06/2020)	2	5,00,00	15,00,00	13,00,00	24,02,00	25,00,00	25,00,00
224065800 - Quality Seed Production, Distribution & Farmers Training Project for crop Production (01/07/2015 - 30/06/2020)	1-3	3,87,00	2,38,00	2,38,00	48,00	20,00,00	20,00,00
224066100 - Extension of irrigation facilities by increasing availability of surface water and removing water logging project in Naogaon District (01/07/2015 - 30/06/2019)	3	25,00,00	13,13,00	12,97,00	0	0	0
224066200 - Enhancement of Irrigation Efficiency Through Construction of Sub-surface Irrigation Channel (01/07/2015 - 30/06/2019)	1-3	48,90,00	22,48,00	18,47,00	0	0	0

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
224262500 - Extension of Irrigation Facilities by Augmentation of Surface Water and Mitigation of Water Logging in Bagha, Chargaht & Paba Upazillas of Rajshahi District)	1-4	0	0	4,25,00	18,10,00	42,00,00	40,00,00
Total : Annual Development Program		82,77,00	52,99,00	51,07,00	42,60,00	87,00,00	85,00,00
Total : Development Activities		82,77,00	52,99,00	51,07,00	42,60,00	87,00,00	85,00,00
Total :		82,77,00	52,99,00	51,07,00	42,60,00	87,00,00	85,00,00

6.10 Bangladesh Agricultural Research Council

6.10.1 Recent Achievements: During the last three years (2015-16 to 2017-18), the program review activities of 6 NARS institutes, the annual research program and the budget of 12 NARS institutes have been approved annually by the Executive Council of the BARC. In addition to this 115 core research programs have been approved and financed through the agricultural research organizations and their associate organizations. Development and dissemination activities of 185 agricultural technologies are ongoing through 12 agricultural research institutes and associates. About 4370 field demonstration and field days on rice and pulse crops have been organized and recommendation have been made by field level problem identification of research and technology dissemination through workshop. Foundation training of 180 agri-scientists has been arranged for human resource development. At present 19 Agri-Scientists are on study to achieve Ph.D degree. Short term trainings have been imparted to 3800 agri-scientists, extension officers and the farmers on 48 subjects to increase efficiency on research and technology dissemination and uplift the research standard. 5160 agri-scientists, extension officers and the farmers attended on the different seminars and workshops on 23 subjects.

6.10.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
1. Innovation of high yielding varieties of different crops, and technologies.	New research action plans prepared	1	Number	40	42	42	45	48	48	50
	New research proposals approved			46	46	50	50	52	52	54
2. Increase the use of innovated varieties and technologies by farmers through training, publications and exhibitions-fairs-rallies-seminars-workshops	Trainees			720	720	750	750	800	850	950

6.10.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects

(Taka in Thousands)

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
Support Activity							
131014500 - Bangladesh Agricultural Research Council	1-2	24,00,06	28,18,85	28,78,05	28,38,00	29,46,95	31,59,45
Total : Support Activity		24,00,06	28,18,85	28,78,05	28,38,00	29,46,95	31,59,45
Total : Operating Activities		24,00,06	28,18,85	28,78,05	28,38,00	29,46,95	31,59,45

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Development Activities							
Annual Development Program							
224064400 - National Agricultura Technology Program Phase-2 Project (NATP-2) 01/10/2015- 30/09/2021	1-2	7,69,78	134,22,00	76,43,00	99,80,00	6,00,00	6,50,00
Total : Annual Development Program		7,69,78	134,22,00	76,43,00	99,80,00	6,00,00	6,50,00
Total : Development Activities		7,69,78	134,22,00	76,43,00	99,80,00	6,00,00	6,50,00
Total :		31,69,84	162,40,85	105,21,05	128,18,00	35,46,95	38,09,45

6.11 Cotton Development Board

6.11.1 Recent Achievements: During the last three years (from 2015-16 to 2017-18), CDB conducted research in various disciplines (breeding, agronomy, entomology, soil science, pathology) on 52.0 hectares of five farms. At field/farmer level, on-farm trials were carried out in various disciplines (agronomy and soil science) on 5.37 hectares of land. During the last three years, 34.8 MT breeder seeds were produced by cultivating 24 hectares land and 198.8 MT foundation seeds were produced by cultivating 137 hectares of land. In Hill Cotton, 0.34 MT breeder seeds were produced by cultivating 1.5 hectares of land and 0.46 MT foundation seeds were produced by cultivating 02 hectares of land. At the same time, 84142 MT cotton fibers were produced on 128350 hectares of land in last three years. At that time, 3 high yielding varieties (hill cotton-3, CB-15 & CB-16) and 1 Hybrid variety of cotton developed by CDB was registered with the National Seed Board.

6.11.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
1. Innovation of high yielding varieties of different crops, and technologies.	Innovation of varieties	1	Number	1	1	1	1	1	1	1
	Set-up trail			63	63	60	29	30	30	30
	Participatory research/ Demonstrated plot			2100	2100	2700	900	1000	1100	1100
	Technologies innovated		Number	2	2	4	3	2	3	3
	Cotton produced		Bale (Lakh)	1.72	1.65	1.80	1.75	1.80	1.85	1.90
2. Increase the use of innovated varieties and technologies by farmers through training, publications and exhibitions-fairs-rallies-seminars-workshops	Cotton farmers trained	1	Number In thousand	7.2	29.00	12.00	6.00	5.00	6.00	6.00
3. Production, certification and distribution of breeder, foundation, certified and truthfully level seeds	Production and distribution of truthfully labelled seeds	2	Metric ton	151	162	152	155	100	100	100
4. Production, certification, preservation and distribution of breeder, foundation and truthfully labelled seeds with adaptability to adverse environment (salinity, draught and water submergence)	Seeds distributed	2	kg	58	60	58	58	40	40	40
5. Meetings, seminars, fairs and technology exchange to encouraging the participation of the private sector in production and development of seeds	Workshop, Meeting- Seminar	2	Number	5	5	6	4	4	4	4
6. Marketing and ginning of cotton seeds	Cotton seeds-ginned	2	Metric ton	262	281	264	283	180	180	180

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
7. Publicity and preservation of information on agriculture marketing and development	Organized meeting/seminar/workshop	4	Number	3	3	3	2	2	2	2

6.11.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects

(Taka in Thousands)

Name of the Institutional Unit/Scheme/Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
General Activity							
1430701 - Cotton Development Board	1-7	40,14,31	5,04,73	5,08,81	6,64,98	6,09,57	6,32,62
1430702 - Regional Offices, Cotton Development Board	1-7	0	2,93,81	3,08,84	3,13,87	3,26,22	3,35,82
1430703 - Zonal Offices, Cotton Development Board	1-7	0	27,66,00	27,93,13	29,03,97	31,17,27	31,96,27
1430704 - Cotton Research, Training and Seed Multiplication Farms, Cotton Development Board	1-7	0	11,56,86	12,10,65	12,08,18	12,97,43	13,34,18
Total : General Activity		40,14,31	47,21,40	48,21,43	50,91,00	53,50,49	54,98,89
Special Activity							
120007600 - Examination Expense Management	1-7	0	1,09,00	1,12,35	0	0	0
Total : Special Activity		0	1,09,00	1,12,35	0	0	0
Total : Operating Activities		40,14,31	48,30,40	49,33,78	50,91,00	53,50,49	54,98,89
Development Activities							
Annual Development Program							
224068800 - Expansion of cotton Cultivation Project (Phase-1) (01/07/2014 - 30/06/2018)	1-2	28,81,85	14,70,00	13,55,00	13,55,00	0	0
Total : Annual Development Program		28,81,85	14,70,00	13,55,00	13,55,00	0	0
Total : Development Activities		28,81,85	14,70,00	13,55,00	13,55,00	0	0
Total :		68,96,16	63,00,40	62,88,78	64,46,00	53,50,49	54,98,89

6.12 Seed Certification Agency

6.12.1 Recent Achievements: During the last three years (2015-16 to 2017-18) 1,27,838 hectares of seed-crop field of notified crops were inspected and evaluated. A total number of 4,32,26,408 certification tags were issued for seeds within approved standard. Purity analysis, moisture determination and germination tests of 34,595 seed samples were done in the National and Regional Seed Testing Laboratories. Amount of certified seeds was 3,87,585 metric tons. A total number of 2,669 farmers & seed dealers and 1,116 officers and staff were trained on seed production, processing & preservation and seed legislations. Numbers of new crop varieties released/ registered on the basis of Value for Cultivation and Uses (VCU) tests and Distinctness, Uniformity and Stability (DUS) tests conducted by this organization were 66 for rice (23 inbreds and 43 hybrids), 4 for wheat, 2 for jute, 18 for potato, 1 for mesta, 1 for kenaf and 2 for sugarcane. During the last three years 3,320 rice samples, 783 wheat samples, 429 jute samples and 789 potato samples from certified seed lots were evaluated through pre-post control grow-out tests. Protein-zinc fortified 1, zinc fortified 1, drought tolerant 1, salinity tolerant 3, tide tolerant 2 varieties of rice, heat tolerant 2 varieties of wheat, heat tolerant 1 & salinity tolerant 1 varieties of potato and flood-drought-salinity & stagnant water tolerant 2 varieties of sugarcane were released during this time.

6.12.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
1. Increase the use of innovated varieties and technologies by farmers through training,	Trained farmers	1	Person	810	1720	840	1980	2100	2200	2300

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
publications and exhibitions-fairs-rallies-seminars-workshops	Seminar/workshop arranged			6	12	14	11	20	21	22
2. Production, certification and distribution of breeder, foundation, certified and truthfully labeled seeds	Field visit of breeder, certified, foundation and Truthfully labeled (rice, wheat, potato and jute)	2	Hector (Thousands)	43	49	48	40	50	52	54
	Production of breeder, foundation and certified seeds (Rice, wheat, potato and jute)		M.T (Thousands)	137	145	137	137	140	145	150
	Sample of breeder, foundation and certified seeds rice, wheat, potato and jute tested		Number	5100	6389	5200	5200	5300	5350	5400
3. Production, certification, preservation and distribution of breeder, foundation and truthfully labelled seeds with adaptability to adverse environment (salinity, draught and water submergence)	Production of breeder, foundation and certified seeds (Rice, wheat, potato and jute)	2	Hector (Thousands))	6	9	6	6	10	12	15
	Sample of breeder, foundation and certified seeds rice, wheat, potato and jute tested		MT (Thousands)	8	23	9	9	25	32	36
4. Ensuring the standardization of seeds	Sample experiment at farmer's level (rice, wheat and jute)	2	Number	2900	8706	3000	4000	4500	4700	5000
	Examination of standardization through Marketing monitoring, sample collection experiment			1700	2482	1850	1800	2500	2700	3000
	Variety evaluated (DUS, VCU experiment)			235	194	230	230	250	260	265
5. Meetings, seminars, fairs and technology exchange to encouraging the participation of the private sector in production and development of seeds.	Developed private entrepreneurs for the production of certified seeds	2	Number	180	287	145	250	160	280	300

6.12.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects

(Taka in Thousands)

Name of the Institutional Unit/Scheme/Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
General Activity							
1430301 - Head Office, Seed Certification Agency	1-5	21,49,00	9,42,00	9,74,04	10,52,50	11,50,55	11,93,69
1430302 - Regional Seed Certification Offices & Seed Laboratories	1-5	0	3,56,00	3,71,45	4,01,71	4,50,47	4,72,31
1430303 - District Seed Certification Offices	1-5	0	17,70,00	15,05,46	16,29,79	18,26,46	18,97,35
Total : General Activity		21,49,00	30,68,00	28,50,95	30,84,00	34,27,48	35,63,35
Special Activity							
120007600 - Examination Expense Management	1-5	0	15,51	15,00	0	0	0
Total : Special Activity		0	15,51	15,00	0	0	0
Total : Operating Activities		21,49,00	30,83,51	28,65,95	30,84,00	34,27,48	35,63,35
Development Activities							
Non-Annual Development Program							
213027600 - Strengthening of Seed Testing Activities through Mobile Seed Testing Laboratory Program	1	0	1,81,10	1,81,10	0	0	0
213027700 - Program on Variety Testing for Denotification of Low Yielding Varieties	1	0	2,29,21	2,29,21	43,21	0	0
213027800 - Determination of Acceptance and Profitability of Modern Rice Varieties Including Narica at Hilly Areas	1-5	0	61,00	61,00	64,00	0	0
Total : Non-Annual Development Program		0	4,71,31	4,71,31	1,07,21	0	0
Annual Development Program							
224262200 - Strengthening Seed Certification Activities Project (SSCAP)	1-5	0	0	50,00	19,58,00	18,93,00	15,00,00
Total : Annual Development Program		0	0	50,00	19,58,00	18,93,00	15,00,00
Total : Development Activities		0	4,71,31	5,21,31	20,65,21	18,93,00	15,00,00
Total :		21,49,00	35,54,82	33,87,26	51,49,21	53,20,48	50,63,35

6.13 Agricultural Information Services

6.13.1 Recent Achievements: In the last three years, nearly 21.07 lac copies of “Krishikotha”, 41,000 copies of “Samprosaronbarta”, 10.6 lac Leaflets, 7.00 lac Booklets, have been printed and distributed among the farmers and related stakeholders. In the same period 2730 number of agriculture related documentaries have been displayed by mobile cinema vans. Moreover, 970 Episodes of “Mati o Masush”, 1095 Episodes of “Banglar Krishi” has been telecasted through BTV. Both the national and regional stations of Bangladesh Betar, agriculture related programs were broadcasted 14 hours daily. Talk shows, 6200 in number, have been broadcasted on BTV in the last 3 years. Twenty-two films and 47 fillers have been made. Training for 182 batches and workshop for 65 batches were arranged in the last 3 years. Besides agriculture information service plays a vital role on behalf of Ministry of agriculture to arrange national fruit fair, world food day and other National/International days related to agriculture. Krishi radio at Amtali upazilla under Barguna district, 52 agro-based E-book, Krishi call center (16123), 499 number of AICCs were established/launched in the given period.

6.13.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
1. Increase the use of innovated varieties and technologies by farmers through training, publications and exhibitions-fairs-rallies-seminars-workshops	Trainees	1	Number (in thousands)	2.00	2.00	2.20	2.20	2.30	2.40	2.50
	Poster			200	200	220	220	225	230	235
	Booklet			80	80	100	100	105	110	115
	Leaflet			70	70	80	80	85	90	95
	Krishikotha			620	900	650	650	700	750	800

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
	published									
	Extension barta published			14	18	14	14	15	16	17
	Agriculture dairy			10	10.5	12	12	12	15	16
2. Providing of E-agriculture based information services		1	Number			-				
	Benefited from AICC			1580000	2625000	1580000	1580000	1600000	1680000	1700000
	Films/filler documentary made			10	10	12	12	12	15	15
	TV, radio, advertisement			25	25	12	12	12	15	15
	Cinema show				0	120	120	125	230	235
	Online Argil. Technology transferred			1400	1400	1500	1500	1550	1600	1650
	Agriculture information service at fingers touch (online kiosk)			4	0	4	4	4	4	4
	E-book			22	22	25	25	26	30	30
	Mati O Manush programme broadcasted			330	330	330	330	330	330	330
	Talk show			60	60	60	60	65	70	75
3. Increasing awareness about food value and nutrition through publications, meetings and workshops	Film Filler	1	Number	6	5	6	6	8	15	15
	Video footage			5	5	6	6	8	10	12
	Poster		Number (in thousands)	60	60	70	70	75	80	85
	Booklet			30	30	40	40	45	50	55
	Leaflet			30	30	40	40	45	50	55
	Cinema show		Number	960	900	960	960	970	970	980
4. Popularizing the use of organic fertilizer, green fertilizer and microbe fertilizer among the farmers	Documentary prepared	3	Number	5	5	6	6	7	8	9
	Fillers prepared			5	5	6	6	7	8	9

* No projection in the future years has shown because a project regarding this activity has completed.

6.13.3 Medium Term Expenditure Estimates by Institutional Unit, Schemes and Projects

(Taka in Thousands)

Name of the Institutional Unit/Scheme/Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
General Activity							
1430401 - Head Office, Agricultural Information Service	1-4	13,64,27	10,45,77	14,01,17	11,19,85	13,68,72	14,55,91
1430402 - Regional Offices, Agricultural Information Service	1-4	0	5,42,81	5,69,81	6,11,15	6,50,25	6,83,30
Total : General Activity		13,64,27	15,88,58	19,70,98	17,31,00	20,18,97	21,39,21
Special Activity							
120007600 - Examination Expense Management	1-4	0	12,00	14,00	0	0	0
Total : Special Activity		0	12,00	14,00	0	0	0
Total : Operating Activities		13,64,27	16,00,58	19,84,98	17,31,00	20,18,97	21,39,21

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Development Activities							
Annual Development Program							
224142800 - Modernization of Agriculture Information Service and Digital Agriculture Information and Communication Strengthening Project (01/01/2018-31/12/2020) Approved	1-4	0	22,70,00	15,20,00	20,00,00	20,00,00	12,00,00
Total : Annual Development Program		0	22,70,00	15,20,00	20,00,00	20,00,00	12,00,00
Total : Development Activities		0	22,70,00	15,20,00	20,00,00	20,00,00	12,00,00
Total :		13,64,27	38,70,58	35,04,98	37,31,00	40,18,97	33,39,21

6.14 Department of Agricultural Marketing

6.14.1 Recent Achievements Over the last three years (2015-16 to 2017-18), collection & dissemination activities of market information through the website of Department of Agricultural Marketing (DAM) has been extended to 64 District offices and 4 Upazilla offices. 21 Wholesale Markets, 60 Growers markets and 1 Central Market at Gabtoli, Dhaka with all kinds of modern amenities including 1 truck and 7 Cool vans have been launched to ensure fair prices of -agroproduces. To promote marketing & value addition activities of agro-produces five Office Cum training centres have been constructed at Comilla, Narsingdi, Rangpur, Khulna & Chuadanga respectively. Under different projects, 18 Assemble centres have also been constructed strictly in some selected di. A total of 1730 Farmers Marketing Groups (FMGs) have been formed and motivational tours have been arranged for 3800 farmers. A total of 50,801 farmers have been provided training on processing, marketing, value addition activities etc Under the Crops Storage Credit expansion program 21,130 metric ton crops have been stored in 81 store houses in 27 districts. An approximately 2563 lac taka loan has been disbursed among the stakeholders against the stored crops. Moreover, loan of tk 258.89 crore has also been disbursed to 33,432 entrepreneurs under Bangladesh Agri-Business Development Project (BADP). To store potato at a cheaper rate at household level 40 potato storage have been constructed. In addition to those 30 Zero Energy Cool Chambers have also been constructed in four districts of Sylhet division. Moreover 10 electronic display boards have been installed in 5 districts including Dhaka for online prize monitoring.

6.14.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
1. Publicity and preservation of information on agricultural marketing and development	Publish market price in Website	4	Number	20000	20200	20000	20000	20000	20000	20000
	Publish Bulletin			4000	4057	4000	4000	4000	4000	4000
	Published Report			300	306	300	300	300	300	300
2. Development and maintenance of market infrastructure and provide other supports	Construction of Assembling Centre	4	Number	2	2	2	0	2	2	2
	Stored crops in crop storage			4200	5110	3500	3500	3600	3800	4000
	Formation of farmers group			100	220	100	100	200	250	300
	Motivational tour			400	535	500	500	100	600	650
	Farmer trainees		Number (in thousands)	3.5	3.535	1.750	1.75	3.00	5.00	7.00
	Loan provided against storage crops		Taka (in lakh)	360	432	260	260	280	290	300
3. Providing technological support and technical assistance to	Agri-business entrepreneurship	4	Number (person)	500	1510	500	600	1000	1500	2000

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
agricultural entrepreneurs and encouraging their investment in agro-processing and agro-business	created (male & female)									
	Establish training cum agro-processing center		Number	250	256	300	300	500	600	700

6.14.3 Institutional Unit, Programs and Projects Wise Medium Term Estimated Expenditure

(Taka in Thousands)

Name of the Institutional Unit/Scheme/Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
General Activity							
1430501 - Head Office, Department of Agricultural Marketing	1-3	21,50,33	6,23,39	7,22,16	6,52,50	6,15,63	6,38,94
1430502 - Divisional Agricultural Marketing Offices	1-3	0	3,90,05	4,24,77	4,30,55	5,42,20	5,64,80
1430503 - Zonal Offices Department of Agricultural Marketing	1-3	0	1,62,00	1,75,34	1,84,55	2,02,15	2,11,15
1430504 - District Marketing Offices, Department of Agricultural Marketing	1-3	0	12,61,12	12,19,74	12,61,35	14,20,05	14,82,85
1430505 - Upazila Marketing Offices, Department of Agricultural Marketing	1-3	0	31,13	30,35	36,22	35,52	37,17
1430506 - Regional Training Centers, Department of Agricultural Marketing	1-3	0	31,31	32,46	1,25,83	2,41,25	2,70,45
Total : General Activity		21,50,33	24,99,00	26,04,82	26,91,00	30,56,80	32,05,36
Total : Operating Activities		21,50,33	24,99,00	26,04,82	26,91,00	30,56,80	32,05,36
Development Activities							
Non-Annual Development Program							
213019900 - Expansion of Processioning and marketing Activities of Freshcut Vegetables and Fruits Programme	2,3	54,61	24,80	24,80	0	0	0
213029000 - Installation of Electronic display board for online price Monitoring Programme	2	0	93,50	93,50	20,50	0	0
Total : Non-Annual Development Program		54,61	1,18,30	1,18,30	20,50	0	0
Annual Development Program							
224068900 - Increasing Cropping Intensity in Sylhet Region Project (DAM Part) (01/03/2015 - 30/06/2019)	1-3	3,33,12	5,50,00	5,75,00	0	0	0
224263700 - Smallholder Agricultural Competitiveness Project (SACP) (DAM Part)	-	0	0	5,25,00	38,36,00	9,00,00	5,00,00
224277100 - Strengthening Flower Marketing System through Market Infrastructure, Preservation & Transportation facilities.	1-3	0	0	32,00	20,00,00	0	0
Total : Annual Development Program		3,33,12	5,50,00	11,32,00	58,36,00	9,00,00	5,00,00
Total : Development Activities		3,87,73	6,68,30	12,50,30	58,56,50	9,00,00	5,00,00
Total :		25,38,06	31,67,30	38,55,12	85,47,50	39,56,80	37,05,36

6.15 Soil Resource Development Institute

6.15.1 Recent Achievements: In the last 3 years (From 2015-16 to 2017-18), a total of 95 'Upazila Land and Soil Utilization Guide' have been updated, printed and distributed in the respective upazilas. About 71,500 soil, water and plant samples have been analyzed and 67,250 fertilizer recommendation cards have been distributed among the farmers through static and mobile soil testing laboratories. 30,500 farmers have been trained on 'Soil Sample Collection Technique' and 'Soil Test Base Balanced Fertilizers Use'. 500 agriculture officers; 1,700 sub-assistant agricultural officers have been trained on 'Use of Land and Soil Utilization Guide'. 10,700 fertilizer samples have been analyzed to identify adulterated fertilizers. Six Hundred of agricultural extension workers, fertilizer dealers and public representatives were provided training on 'Identification of adulterated fertilizer' in field level. 380 nos. of 'Union Land, Soil and Fertilizer Recommendation Guide'; 23,000 booklets on 'Soil Sample Collection Technique' and 12,500 booklets on

'Adulterated Fertilizer Identification Methods' have been printed and distributed. SRDI introduced 'Offline Digital Fertilizer Recommendation System' simultaneously with 'Online Fertilizer Recommendation System' launched throughout the country.

6.15.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
1. Provide e-agriculture information service	Online services received	1	Number (person)	12000	9050	12500	12500	13000	13500	13500
2. Identification of soil and land resources through soil survey and classification of land and soil resources in terms of their productivity	Field survey	3	Number	30	50	30	50	50	40	40
	Upazilla directories printed			30	30	30	50	50	40	40
	Union wise land, soil and fertilizer recommendations materials published			100	90	100	130	130	150	150
3. Extension of soil test facilities to Upazila and Union level	Soil samples analyzed	3	Number (Thousands)	18.5	18.51	18.50	18.50	19	19.5	19.5
	Farmer's soil sample analyze and fertilizer recommendation card distributed in MSTL		Number	5600	5600	5600	5600	5600	5600	5600
	Fertilizer recommendation card printed and distributed			17500	17500	17500	17500	18000	18500	18500
	Fertilizer sample analyze			4000	3703	4000	4000	4000	4200	4200
4. Popularize among the farmers the use of organic fertilizer, green fertilizer and microbe fertilizer	Farmers training	3	Number	12000	7750	12000	12000	12000	12000	12000
	Exhibition of innovated technologies on soil and fertilizer set			21	26	21	42	42	42	42
	Farmers meeting/ field day			21	21	21	42	42	42	42
5. Popularizing sustainable soil management technologies among the farmers	Soil preservation and water diversification management technology	3	Number	1	6	5	5	5	5	5

6.15.3 Institutional Unit, Programs and Projects Wise Medium Term Estimated Expenditure

(Taka in Thousands)

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
General Activity							
1430601 - Head Office, Soil Resource Development Institute	1-5	32,64,55	18,86,00	17,40,85	16,56,81	19,84,33	20,68,38
1430602 - Regional Offices of Soil Resource Development Institute	1-5	0	4,61,50	4,86,30	5,35,73	5,66,01	5,92,13
1430603 - District Offices of Soil Resource Development Institute	1-5	0	7,03,00	7,50,45	8,31,21	9,12,88	9,65,31
1430604 - Central Laboratories, Soil Resource Development Institute	1-5	0	1,00,00	1,52,78	1,46,40	1,69,96	1,81,70
1430605 - Regional Laboratories, Soil Resource Development Institute	1-5	0	9,44,18	9,64,09	10,73,85	11,34,06	11,90,97

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Total : General Activity		32,64,55	40,94,68	40,94,47	42,44,00	47,67,24	49,98,49
Total : Operating Activities		32,64,55	40,94,68	40,94,47	42,44,00	47,67,24	49,98,49
Development Activities							
Non-Annual Development Program							
213031901 - Strengthening of on farm soil test based balanced fertilizer recommendation service through mobile soil testing laboratory (MSTL)	-	0	0	0	2,77,50	1,87,50	0
Total : Non-Annual Development Program		0	0	0	2,77,50	1,87,50	0
Annual Development Program							
224142700 - Strengthening of Soil Research and Research Facilities (SRSRF) (01/07/2017-30/06/2022) Approved	5	0	14,20,00	14,10,00	12,89,00	5,50,00	4,00,00
Total : Annual Development Program		0	14,20,00	14,10,00	12,89,00	5,50,00	4,00,00
Total : Development Activities		0	14,20,00	14,10,00	15,66,50	7,37,50	4,00,00
Total :		32,64,55	55,14,68	55,04,47	58,10,50	55,04,74	53,98,49

6.16 Bangladesh Institute of Research and Training on Applied Nutrition

6.16.1 Recent Achievements: A total no. of 17029 District/Upazila Level GO & NGO Officials, Sub-Assistant Agriculture Officers (SAAO), Field Workers of Women & Children Affairs, School Teachers, Social Workers, UP members, Imam/ Other Religious Leaders & the Farmers were trained on Food Based Nutrition (Applied Nutrition) during the last 3 years (2015-16 to 2017-18). Seventy Two Radio Short Stories were broadcasted in order to increase awareness among the mass people. Twenty-six Agricultural fairs, World Food Day and Nutrition week were observed. Beside this, a total nos. of 26 campaign/ workshops (Day long) were organized on the Nutritional activities. A total nos. of 1400 Upazila Agriculture Officers, Agriculture Extension Officer, School/College Teachers, Sub-Assistant Agriculture Officers, Local Leaders, Imam & NGO Representatives and students of Girls' High School were participated in these workshops.

6.16.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
1. Increasing awareness about food value and nutrition through training publications, meetings and workshops	Number of trained persons	1	Number	6300	6300	12840	15000	26760	32100	32100
	Workshops			10	10	40	40	50	60	60
	Short stories transmit through Radio			35	25	50	55	75	75	80
	Participation in fair			12	11	15	15	20	20	24

6.16.3 Institutional Unit, Programs and Projects Wise Medium Term Estimated Expenditure

(Taka in Thousands)

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
Support Activity							
131014900 - Bangladesh Institute of Research and Training On Applied Nutrition (BIRTAN).	1	4,53,09	19,57,24	15,58,01	21,63,00	41,50,11	42,81,37
Total : Support Activity		4,53,09	19,57,24	15,58,01	21,63,00	41,50,11	42,81,37
Total : Operating Activities		4,53,09	19,57,24	15,58,01	21,63,00	41,50,11	42,81,37

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Development Activities							
Annual Development Program							
224064500 - Infrastructure Development and strengthening of Bangladesh institute of Research and Training on Applied Nutrition (BIRTAN) (01/07/2013-30/06/2017) approved	1	38,00,00	60,25,00	112,28,00	70,00,00	12,00,00	239,84,00
224065000 - Integrated Agricultural Approach for Ensuring Nutrition and Food Security Project (BIRTAN Phase) (01/07/2014-30/06/2019) approved	1	1,60,00	2,00,00	2,00,00	2,21,00	0	0
Total : Annual Development Program		39,60,00	62,25,00	114,28,00	72,21,00	12,00,00	239,84,00
Total : Development Activities		39,60,00	62,25,00	114,28,00	72,21,00	12,00,00	239,84,00
Total :		44,13,09	81,82,24	129,86,01	93,84,00	53,50,11	282,65,37

6.17 National Agricultural Training Academy (NATA)

6.17.1 Recent Achievements: In 2015-16, NATA organized 8 training courses for 450 officers in 15 batches (8 technical and 7 management aspect), three seminar/workshops and implemented seven field demonstrations. NATA hosted two batches (N-60th and N-61st) of six months long foundation training course of nine cadre's officers comprising 72 participants as an extended programme of the BPATC. In 2016-17, NATA trained 764 officers (NATA funded 18 batches of 532 officers and sponsored 9 batches of 232 officers), arranged three seminar/workshops and established seven demonstrations. In the year 2017-18, NATA arranged training programme of 725 officers in 25 batches and organized 3 seminar/workshops. NATA also completed training courses for 23 scientists in one batch and 580 1st class Officers in 23 batches successfully as sponsored program.

6.17.2 Activities, Output Indicators and Targets

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
1. Increase the use of innovated varieties and technologies by farmers through, training, publications and exhibitions-fairs-rallies-seminars-workshops	Trainees	1	Number	600	725	660	690	750	810	840
	Exhibitions			2	3	3	3	3	2	2

6.17.3 Institutional Unit, Programs and Projects Wise Medium Term Estimated Expenditure

(Taka in Thousands)

Name of the Institutional Unit/Scheme/ Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
General Activity							
1430801 - National Agricultural Training Academy (NATA)		7,49,66	10,49,49	10,03,78	12,11,00	12,56,60	13,02,10
Total : General Activity		7,49,66	10,49,49	10,03,78	12,11,00	12,56,60	13,02,10
Total : Operating Activities		7,49,66	10,49,49	10,03,78	12,11,00	12,56,60	13,02,10
Development Activities							
Non-Annual Development Program							
213028800 - Modern Agriculture Technology Demonstration and NATA Farm Development Programme	1	0	66,25	66,25	7,60	0	0
Total : Non-Annual Development Program		0	66,25	66,25	7,60	0	0

6.18.1 Recent Achievements: The Bangladesh Wheat and Maize Research Institute was established by enactment of the "Bangladesh Wheat and Maize Research Institute Act' 2017" on November 13, 2017 which was notified by Gazette on 22 November 2017. Prior to this, the related activities were conducted from the wheat research center and maize section under Bangladesh Agricultural Research Institute. In the last three financial year (2015-2016 to 2017-18), three disease tolerant and heat tolerant wheat varieties and 4 high yielding varieties of maize were invented and released by the then wheat research centre, maize section and newly created Institute. A total of 9809 germplasms of wheat and maize have been collected and evaluated from own arrangement and CIMMYT. Apart from this, six technologies have been developed on soil and fertilizer management, pest and insect management, new crop formulations for crop intensification. In the last three years, 9403 persons including scientists, extension and NGO activists and farmers were trained. Apart from this, a total of 4340 persons have been informed about new technologies through 52 seminars/workshops/field days. To disseminate invented technology, 7 publications and 3360 exhibition blocks have been set up. A total of 312 metric tons of breeder and truthfully labeled seeds of wheat and maize were distributed among farmers, government, NGOs and individual entrepreneurs. Among them, 300 metric tons of seeds were adaptive to adverse climatic condition. A total of 15 TV programs related to wheat and maize varieties and technology have been aired in last three years. Besides, a bilateral agreement has been signed with private organization for producing and promoting hybrid maize seeds.

[illegible]

Activities	Output Indicator	Related Strategic Objectives	Unit	Revised Target	Actual	Target	Revised Target	Medium Term Targets		
				2017-18		2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8	9	10	11
6. Meetings, seminars, fairs and technology exchange to encouraging the participation of the private sector in production and development of seeds	Memorandum of Understanding signed with private entrepreneurs	2	Number	-	-	1	1	1	1	1

6.18.3 Institutional Unit, Programs and Projects Wise Medium Term Estimated Expenditure

(Taka in Thousands)

Name of the Institutional Unit/Scheme/Project	Related Activity	Actual 2017-18	Budget	Revised	Medium Term Expenditure Estimates		
			2018-19		2019-20	2020-21	2021-22
1	2	3	4	5	6	7	8
Operating Activities							
Support Activity							
135015200 - Bangladesh Wheat and Corn Research Institute	1-6	0	17,18,30	16,22,80	17,27,00	24,32,83	26,74,05
Total : Support Activity		0	17,18,30	16,22,80	17,27,00	24,32,83	26,74,05
Total : Operating Activities		0	17,18,30	16,22,80	17,27,00	24,32,83	26,74,05
Total :		0	17,18,30	16,22,80	17,27,00	24,32,83	26,74,05