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# **Bangladesh**

## **Oilseeds and Products Annual**

2018

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## **Report Highlights:**

Soybean area and production levels for MY 2018/19 (July-June) are projected to increase to 80 thousand hectares (HA) and 152 thousand metric tons (MT) respectively, due to a switch from *Boro* rice production. Post's soybean planting area and production estimates for MY 2017/18 are lowered to 60 thousand HA and 114 thousand MT due to unsuitable conditions for planting at the optimal time, and the shift of land to *Boro* rice cultivation due to an expected higher harvest price. MY 2018/19 soybean and soymeal imports are estimated to increase to 1.1 MMT and 550 thousand respectively, to keep pace with demand in the feed industry, as well as growth in the livestock and fisheries sectors. The import of edible oil for MY 2018/19 is forecast at 2.4 MMT on expected lower international prices and fast growing demand by an increasing population.

## Commodities: Oilseed: Soybean

#### **Production:**

Post forecasts marketing year (MY) 2018/19 cultivation area for soybean at 80 thousand hectares (HA). Assuming normal weather conditions during the planting and growing stage and average yield, soybean production is forecast to increase by 33 percent to 152 thousand MT in MY 2018/19 (Jul-Jun) due to increased production area compared to MY 2017/18.

Post estimates a 27 percent reduction in cultivated area to 60 thousand hectares compared to USDA official estimates in MY 2017/18. Farmers switched to *Boro* rice cultivation with an expectation of a higher price for unhusked rice (paddy), and a shortage of seed for planting. In addition, some farmers were unable to plant soybeans at the appropriate time, as the land was not in optimal condition for planting due to water stagnation. Soybeans for MY 2017/18 were planted in January-February and will be harvested by April-May. Post forecasts five percent lower production to 114 thousand MT in MY 2017/18 due to lower cultivated area based on a normal yield of 1.9 MT/ha.

Post also estimates 21 percent lower production to 120 thousand MT in MY 2016/17 due to crops damaged by heavy rainfall just before the harvest in mid-April 2017. The harvested area in that market year is also estimated lower at 65 thousand hectares compared to planted area of 81 hectares.

Among oilseeds in Bangladesh, in fiscal year (FY) 2016-17, soybeans are the fourth ranked crop in terms of total planted area at 9.82% of total oilseed planted area; mustard dominates with 67%, followed by sesame (10.88%), groundnuts (11.55%) and others (sunflower, linseed) respectively (Figure 2) (See Table 5). That in large part reflects the priorities of the Bangladesh Agricultural Research Institute (BARI) and Bangladesh Institute of Nuclear Agricultural (BINA), which are funded by the government of Bangladesh. These institutes' current research efforts for soybean are just 10% of total oilseed research, compared with 70% for mustard.

About 70 percent of soybean farmers are cultivating the variety "Shohag", which was officially released in 1990; its average yield is 1.8-2 ton per hectare. Bangladesh Agricultural Research Institute (BARI) developed variety BARI Soybean-5 and BARI Soybean-6 which is planted by some 30 percent of soybean farmers. These high yield BARI varieties are popular, but supply constraints limit their impact in the field and overall yields remain flat, which in turn hinders growth of this subsector.

Poor soil and competing crops limit the area available for soybean cultivation. Soybean competes with crops like rice (*Boro* season rice), ground nut, and sunflower in the river basin islands (charland) of the southern coastal part of the country. Charland is available for soybean cultivation because poor irrigation facilities and increasing water salinity in the late winter and summer season make charland unsuitable for *Boro* season rice production. Soybean cultivation in general requires less irrigation and less fertilizer. The lower production costs, coupled with good market prices, give farmers a premium for soybeans and ground nuts compared to other seasonal crops.

Palm cultivation for commercial use is starting at a nascent level. Some farmers are trying to raise palm at a farm-level scale, but palm production does not receive the support of Bangladesh extension services.

## **Consumption:**

In MY 2018/19 soybean crushing is expected to increase by 4.35 percent to 1.2 million MT due to gradual increased capacity of millers to meet the steady demand of soymeal for the feed industry, and the rising demand of animal protein and soybean oil for human consumption.

Human consumption as a grain, or any other non-oil form, is expected to be stable at five thousand MT in MY 2018/19, driven by production of various soy-based processed foods and food supplements in relation to more health consciousness by the consumer.

Growth and expansion of the feed industry, as well as the poultry and livestock sectors, is a result of increasing consumption of meat, eggs and fish. Compared to CY 2010, the per capita consumption of chicken was increased by 54 percent, egg consumption by 89 percent and fish intake increased by 26 percent in CY 2016 (See Table 6).

#### Trade:

Post estimates soybean imports in MY 2018/19 are projected to rise by 4.76 percent to 1.1 MMT due to increasing demand for soymeal as raw materials used in animal feed and for soybean oil use in daily cooking. In MY 2017/18, imports are expected to rise to 1 MMT on strong demand in the crushing industry. Soybeans imported from the United States (US) account for 93 percent market share, with 9 percent growth rate annually, with a forecasted rise in imports to 1.05 MMT in MY 2018/19. A poultry feed sector insider reported that leading poultry producers put emphasis on quality feed that has a higher protein percentage. Feed with US soybean-sourced soymeal has extra value when farmers demand high quality feed. Feed used in egg production also prefer US soybean based soymeal, realizing that it improves egg quality.

Commodity: Oil Meal: Soymeal

#### **Production:**

Domestic soymeal production is shares 64 percent of the demand generated by stable and expanding feed industries. In MY 2018/19, post forecasts soymeal production to increase by 4.49 percent to 930 thousand MT driven by increasing demand in the feed industries. Feed industries are expanding to supply feed for not only poultry and other livestock sectors, but also for the aquaculture sector which is growing nine percent annually and produced 2.33 million MT of fish in FY 2016-17.

The two major oilseed crushing plants in Bangladesh have an estimated capacity of 4,200 MT/day (max 7000 MT/day), with the facility to crush soybean, mustard and rapeseed. Since 100 percent of imported soybean is crushed to produce meal and oil, the surge in imports of soybean gradually reduces the yearly percentage increase in imports of soymeal. Sources indicate that the increased tariff on soymeal will

likely lead to capacity expansion and establishment of more crushing plants. Strong soybean imports and domestic production have enabled soybean crushing plants to increase soymeal production.

## **Consumption:**

Based upon the normal increasing pace of feed demand and consumption in the poultry, aqua and livestock sectors in MY 2018/19, feed waste and domestic consumption is projected to grow by 3.57 percent to 1.45 MMT. Investment in the aqua and poultry sector is increasing as the sector ramps up to reach capacities to supply increasing demands for protein consumption. The poultry sector contributes 86 percent of livestock sector production and cultured fisheries share 57 percent of the total fish production in the country. The growth of contribution to Gross Domestic Product (GDP) by the fisheries sector is 6.23 percent and 3.31 percent by livestock sector in FY 2016-17, which is higher than agriculture and forestry sector (1.96 percent).

Industry reports indicate that poultry farms of all sizes number about 65-70 thousand and are growing at the rate of 10-15% per year. Aquaculture farms number about 2 million and the area under production (metric tons per hectare) is increasing at 5.7% per year. A total of 100 fully automated feed mills, and 45 small and medium feed mills, produce 7.26 MMT of feed for the livestock sector, including poultry (3.61 MMT), cattle (2.22 MMT), and aquaculture (1.43 MMT).

Raw materials used for poultry feed production include maize (55-65 percent), soybean meal (20-25 percent), mustard oil cake (10-25 percent), rice bran (rice by product) (10-20 percent), and meat and bone meal (10-20 percent). According to the report, demand for soybean in poultry feed is forecasted at 1.65 - 1.97 MMT by 2020 (See Table 13).

### **Trade:**

Imports of soybean for crushing, as well as increased domestic soybean production, will marginally drive soymeal imports by a projected 10 percent rise to 550 thousand MT in MY 2018/19. For the same reasons, soymeal imports are estimated to be 500 thousand MT in MY 2017/18. India (57%), Brazil (18%) and the U.S. (17%) are the major players in exporting soymeal to Bangladesh.

**Commodity:** 

Oil: Soybean oil and Palm oil

**Production:** 

In MY 2018/19, projected increases in soybean production and imports will drive total soybean oil production to rise 4.9 percent to 214 thousand MT. Increases in human consumption through diversified utilization will drive soybean oil production to an estimated 204 thousand MT in MY 2017/18.

A number of 80 oil refineries have total production capacity of 2.9 million MT, but they are utilizing only 48% of production capacity. The excess capacity is available to supply the growing demand for edible oil.

There is no domestic palm oil production industry in the country. Some farmers are cultivating palm trees on a limited scale and extracting oil in small amounts for retail and family consumption.

## **Consumption:**

Per capita consumption of edible oil was 26.75 grams/day in year 2016. Although total food intake was reduced to 975.53 grams/day in 2016 from 999.99 grams/day in 2010, edible oil consumption has increased by 30.4 percent in 2016 from 20.51 grams/day in 2010 to 26.75 grams/day (See Table 6). Post's edible oil (soybean oil and palm oil) consumption is forecast to rise by 6.72 percent to 2.7 MMT in MY 2018/19 owing to an increased population, rising per capita income levels, and increasing oil use as an ingredient in processed food. Palm oil will constitute 1.58 MMT of consumption; soy oil, 1.12 MMT. Other minor edible oils such as mustard/rapeseed oil, rice bran oil, sesame oil, sunflower oil are not included in this report.

In February 2018, retail prices of soybean oil ranged from BDT 85-88 (US\$1.02-1.06) per liter and palm oil was BDT 70-72 (US\$0.84-0.87) per liter. The soybean price per liter has increased 1.76 percent from July 2017 to February 2018. On the other hand, palm oil remains unchanged since July 2017.

Most households prefer soybean oil for cooking purposes, but such oil is often blended with palm oil. Edible oils sold in bulk constitute 75% of the market, a segment in which palm oil dominates, while soybean oil is the dominant oil in the bottled vegetable oil market.

Besides general cooking purposes, palm oil is also the dominant oil for food processing industries (13%) and shortening/Vanaspati (fully or partially hydrogenated vegetable cooking oil) industries (20%); it is also used in the paint industry. Increases in fast food consumption as well as higher incomes in rural areas have driven consumption of palm-soy oil mixes as well.

### **Trade:**

In MY 2018/19, post forecasts a rise in soybean oil imports by 5.88 percent to 900 thousand MT and a 6.9 percent increase in the import of palm oil to 1.55 MMT. The trend in diverse processed foods consumption, and keeping pace with population and urbanization have fueled the continued rise of vegetable oil imports.

In MY 2017/18, soybean oil imports are estimated to rise by 2.41 percent to 850 thousand MT which is 3.4 percent lower than the USDA official number. Palm oil imports are forecasted to move up by 10.35

percent to 1.45 million MT owing to continued lower prices in the market and increased consumption in the upcoming month of Ramadan. Increased vegetable oil import tariff by India, and expected lower price trend in the international market may support importing more palm oil. Argentina (63%) and Paraguay (22%) are the major players in the soybean oil export market, while Indonesia (78%) and Malaysia (22%) supply the largest shares of palm oil to the country. Bangladesh also imports soybean and mustard in seed form to be crushed and sold locally. Other oil imports include crude soybean oil, crude palm oil, and crude palm olein.

## **Policy:**

In FY 2017/18, the Government of Bangladesh (GOB) revised its tariff structure for importing soybean, soymeal, soybean oil and palm oil (See Table 23, 24 and 25). GOB has an open trade policy (no tariffs) for soybean, but 10% regulatory duty has been imposed on soymeal in FY 2017/18 which was 10% custom duty in earlier FY 2016/17. The duty shift from custom duty to regulatory duty reduced 0.4 million MT soymeal imports from India under SAFTA trade agreement. Under that agreement, importers can import tax free soymeal max 0.4 MMT from India when there is 10% custom duty. The duty free policy for soybeans is intended to support the local crushing industry to ensure local supply of soymeal at a lower price. But since the duty on soymeal has stifled imports, feed millers are in fact seeing increased costs for soymeal as a result of collusion and price-fixing among only two domestic giant seed crushing plants. To control an increasing price in the domestic market and reduce risk of fully depending on local soymeal producers, feed millers are continuing to import soymeal in moderate amounts.

Regarding biosafety restrictions, biosafety rules detail guidelines to follow for importing GE product, but the approval mechanism for importing such shipments is not widely understood nor implemented; most GE product is not subject to additional inspection requirements.

**Table 1. Bangladesh: Commodity, Oilseed, Soybean, PSD** (Area in 1000 hectares and production in 1000 metric tons)

Oilseed, Soybean	2016/2017		2017/202	18	2018/2019		
Market Begin Year	<b>July 20</b> 1	16	July 2017		<b>July 2018</b>		
Bangladesh	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	

Area Planted	81	81	82	60	0	80
Area Harvested	81	65	82	60	0	80
Beginning Stocks	187	187	46	13	0	17
Production	153	120	156	114	0	152
MY Imports	815	815	1100	1050	0	1100
MY Imp. from U.S.	761	761	1050	1000	0	1050
MY Imp. from EU	0	0	0	0	0	0
Total Supply	1155	1122	1302	1177	0	1269
MY Exports	0	0	0	0	0	0
MY Exp. to EU	0	0	0	0	0	0
Crush	1100	1100	1125	1150	0	1200
Food Use Dom. Cons.	5	5	5	5	0	5
Feed Waste Dom. Cons.	4	4	5	5	0	5
Total Dom. Cons.	1109	1109	1135	1160	0	1210
Ending Stocks	46	13	167	17	0	59
Total Distribution	1155	1122	1302	1177	0	1269

**Table 2. Bangladesh: Commodity, Meal, Soybean, PSD** (Area in 1000 hectares and production in 1000 metric tons)

Meal, Soybean	2016/201	17	2017/2018		2018/2019	
Market Begin Year	<b>July 20</b> 1	16	July 201	17	<b>July 20</b> 1	18
Bangladesh	USDA	New	USDA	New	USDA	New

	Official	Post	Official	Post	Official	Post
Crush	1100	1100	1125	1150	0	1200
Extr. Rate, 999.9999	0.7727	0.7727	0.7778	0.7739	0	0.775
Beginning Stocks	144	144	124	124	0	110
Production	850	850	875	890	0	930
MY Imports	454	454	650	500	0	550
MY Imp. from U.S.	99	99	120	125	0	130
MY Imp. from EU	0	0	0	0	0	0
Total Supply	1448	1448	1649	1514	0	1590
MY Exports	0	0	0	0	0	0
MY Exp. to EU	0	0	0	0	0	0
Industrial Dom. Cons.	0	0	0	0	0	0
Food Use Dom. Cons.	4	4	4	4	0	4
Feed Waste Dom. Cons.	1320	1320	1480	1400	0	1450
Total Dom. Cons.	1324	1324	1484	1404	0	1454
Ending Stocks	124	124	165	110	0	136
Total Distribution	1448	1448	1649	1514	0	1590

**Table 3. Bangladesh: Commodity, Oil, Soybean, PSD** (Area in 1000 hectares and production in 1000 metric tons)

Oil, Soybean 2016/2017 2017/2018 2018/2019
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Market Begin Year	July 2	016	July 2	2017	July 2	018
Bangladesh	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Crush	1100	1100	1125	1150	0	1200
Extr. Rate, 999.9999	0.1773	0.1773	0.1778	0.1774	0	0.1783
Beginning Stocks	75	75	95	95	0	89
Production	195	195	200	204	0	214
MY Imports	830	830	880	850	0	900
MY Imp. from U.S.	1	1	0	0	0	0
MY Imp. from EU	0	0	0	0	0	0
Total Supply	1100	1100	1175	1149	0	1203
MY Exports	0	0	0	0	0	0
MY Exp. to EU	0	0	0	0	0	0
Industrial Dom. Cons.	105	105	110	110	0	120
Food Use Dom. Cons.	900	900	980	950	0	1000
Feed Waste Dom. Cons.	0	0	0	0	0	0
Total Dom. Cons.	1005	1005	1090	1060	0	1120
Ending Stocks	95	95	85	89	0	83
Total Distribution	1100	1100	1175	1149	0	1203

Table 4. Bangladesh: Commodity, Oil, Palm, PSD

(Area in 1000 hectares and production in 1000 metric tons)

Oil, Palm	2016/2	017	2017/2	018	2018/2	019
Market Begin Year	July 20	016	July 2	017	July 2	018
Bangladesh	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted	0	0	0	0	0	0
Area Harvested	0	0	0	0	0	0
Trees	0	0	0	0	0	0
Beginning Stocks	131	131	131	131	0	111
Production	0	0	0	0	0	0
MY Imports	1314	1314	1600	1450	0	1550
MY Imp. from U.S.	0	0	0	0	0	0
MY Imp. from EU	0	0	0	0	0	0
Total Supply	1445	1445	1731	1581	0	1661
MY Exports	0	0	0	0	0	0
MY Exp. to EU	0	0	0	0	0	0
Industrial Dom. Cons.	100	100	120	120	0	130
Food Use Dom. Cons.	1214	1214	1500	1350	0	1450
Feed Waste Dom. Cons.	0	0	0	0	0	0
Total Dom. Cons.	1314	1314	1620	1470	0	1580
Ending Stocks	131	131	111	111	0	81
Total Distribution	1445	1445	1731	1581	0	1661

Figure 1. Bangladesh: Crop area share in percentage

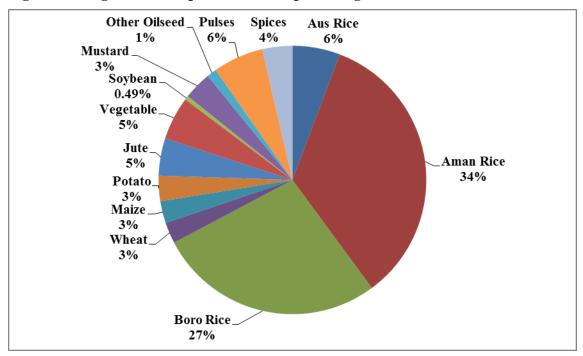


Figure 2. Bangladesh: Oilseed crop area share in percentage

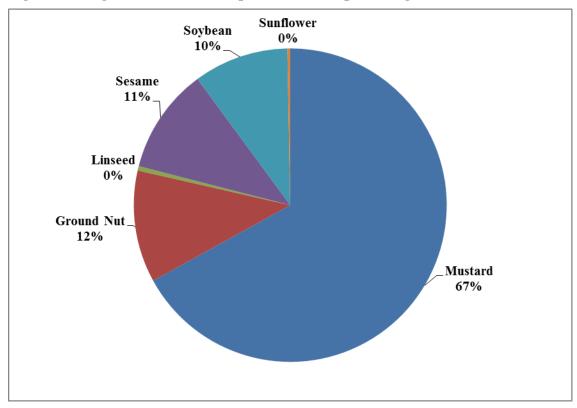


Figure 3. Bangladesh: Soybean and soymeal import trend

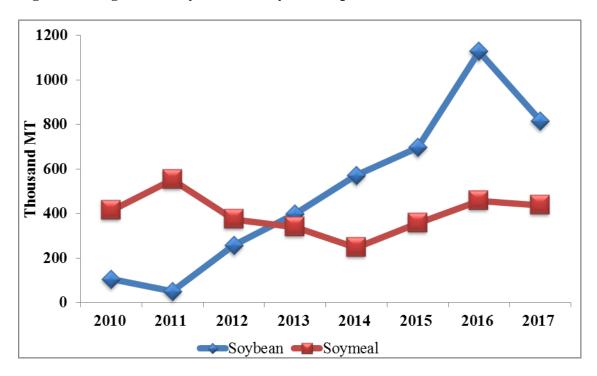


Figure 4. Bangladesh: Soybean oil and palm oil import trend

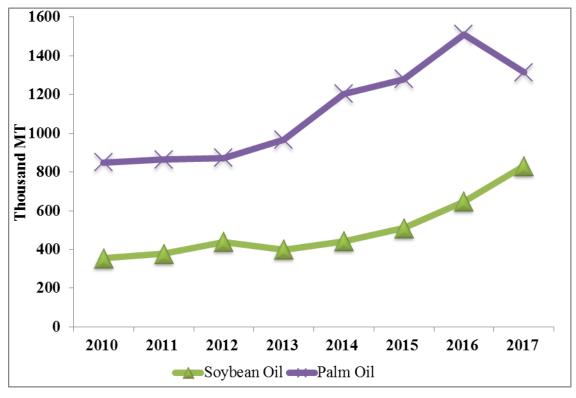


Figure 5. Bangladesh: Soybean exporter's share in MY 2016/17

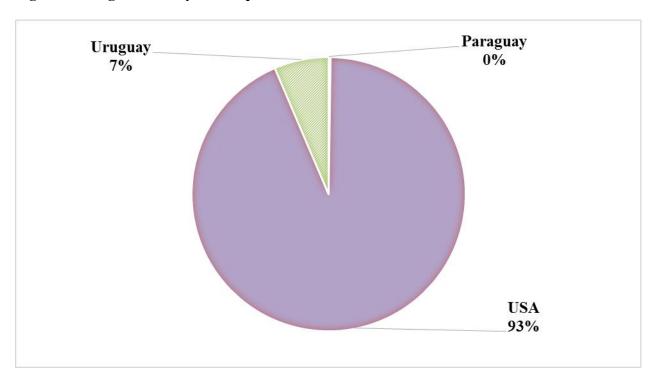


Figure 6. Bangladesh: Soymeal exporter's share in MY 2016/17

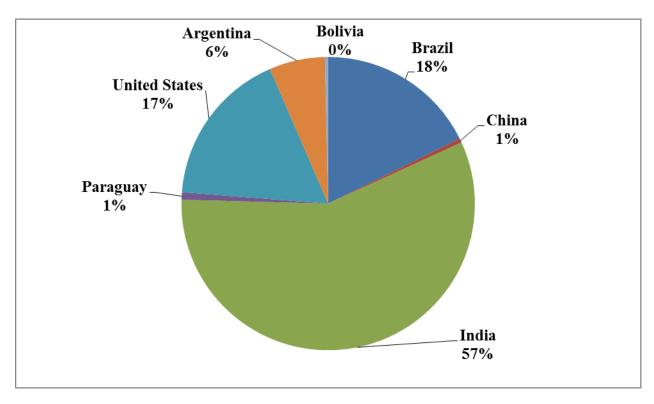


Figure 7. Bangladesh: Soybean oil exporter's share in MY 2016/17

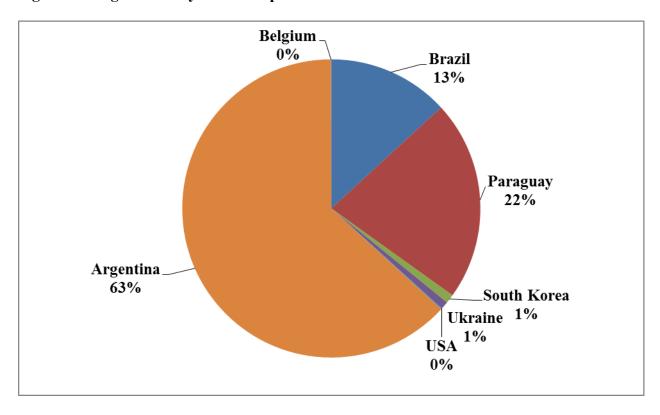


Figure 8. Bangladesh: Palm oil exporter's share in MY 2016/17

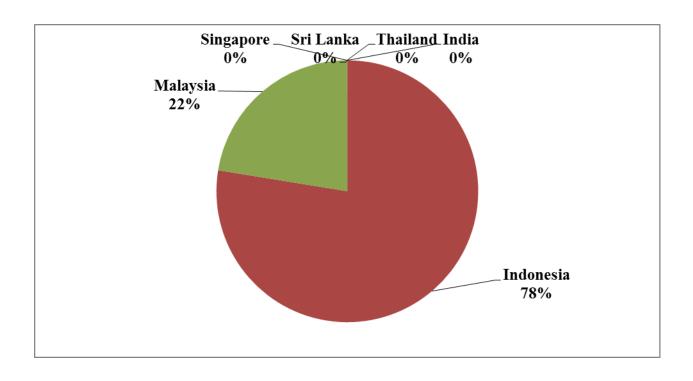


Table 5. Bangladesh: Oilseed crop area and production in MY 2016/17

Oilseeds	Area (ha)	Area (%)	<b>Production (Thousand MT)</b>	Yield (T/ha)
Mustard	5.51	67	705.3	1.28
Ground Nut	0.95	11.55	150.6	1.586
Linseed	0.038	0.46	3.6	0.947
Sesame	0.89	10.88	89.5	1
Soybean	0.808	9.82	105.5	1.306
Sunflower	0.024	0.29	4.2	1.75
Total	8.227	100	1058.7	7.869

Source: Department of Agricultural Extension, Ministry of Agriculture

Table 6. Bangladesh: Per capita food intake gram per day

	201	201	200	200	1995				
Food Item	6	0	5	0	-96	2016	2010	2005	2000
roou item	Inta	Inta	Inta	Inta	Inta	Change	Change	Change	Change
	ke	ke	ke	ke	ke	(%)	(%)	(%)	(%)
	975.	999.	947.	893.	913.				
Total	53	99	75	06	8	-2.45	5.51	6.12	-2.27
	367.	416.	439.	458.	464.				
Rice	19	01	64	54	3	-11.74	-5.37	-4.12	-1.24
	19.8		12.0	17.4					
Wheat	3	26	8	4	33.7	-23.73	115.23	-30.73	-48.25
	64.8			55.4					
Potato	3	70.3	63.3	5	49.5	-7.78	11.06	14.16	12.02
			14.1	15.7					
Pulses	15.6	14.3	9	7	13.9	9.09	0.78	-10.02	13.45
	167.	166.	157.	140.	152.				
Vegetables	3	08	02	47	5	0.73	5.77	11.78	-7.89
	26.7	20.5	16.4	12.8					
Edible oil	5	1	5	2	9.8	30.42	24.68	28.32	30.82
	31.0		18.3	15.4					
Onion	4	22	7	1	11.6	41.09	19.76	19.21	32.84
Beef	7.54	6.84	7.78	8.3	6.6	10.23	-12.08	-6.27	25.76
Mutton	0.55	0.6	0.59	0.49	1	-8.33	1.69	20.41	-51.00
	17.3	11.2							
Chicken/duck	3	2	6.85	4.5	4	54.46	63.80	52.22	12.50
	13.5								
Eggs	8	7.2	5.15	5.27	3.2	88.61	39.81	-2.28	64.69
	62.5		42.1	38.4					
Fish	8	49.5	4	5	43.8	26.42	17.47	9.60	-12.21
Milk & milk	27.3	33.7	32.4	29.7	32.6	-19.01	4.07	9.05	-8.87
products	1	2		1	32.0	-19.01	4.07	9.03	-0.07
	35.7		32.5	28.3					
Fruits	8	44.7	4	5	27.6	-19.96	37.37	14.78	2.72
Sugar/Gur	6.9	8.4	8.08	6.85	9.2	-17.86	3.96	17.96	-25.54

	30.7	29.8	24.7						
Fast food	7	3	6			3.15	20.48		
Miscellaneou	80.6	72.7	48.3	55.4					
S	2	8	8	4	50.9	10.77	50.43	-12.73	8.92

Source: Bangladesh Bureau of Statistics, Household Income and Expenditure Survey, 2016

Table 7. Bangladesh: Number (million) of livestock: Ruminant and poultry

FY	Cattl e (M)	Buffal o (M)	Shee p (M)	Goat (M)	Total Ruminant (M)	Chick en (M)	Duck (M)	Total Poultry (M)	Total Livestock (M)
200									
7-08	22.9	1.3	2.8	21.6	48.5	212.5	39.8	252.3	300.8
200									
8-09	23.0	1.3	2.9	22.4	49.6	221.4	41.2	262.6	312.2
200									
9-10	23.1	1.3	3.0	23.3	50.7	228.0	42.7	270.7	321.4
201									
0-11	23.1	1.4	3.0	24.1	51.7	234.7	44.1	278.8	330.5
201									
1-12	23.2	1.4	3.1	25.1	52.8	242.9	45.7	288.6	341.4
201									
2-13	23.3	1.5	3.1	25.3	53.2	249.0	47.3	296.3	349.5
201									
3-14	23.5	1.5	3.2	25.4	53.6	255.3	48.9	304.2	357.8
201									
4-15	23.6	1.5	3.3	25.6	54.0	261.8	50.5	312.3	366.3
201									
5-16	23.8	1.5	3.3	25.8	54.4	268.4	52.2	320.6	375.0
201									
6-17	23.9	1.5	3.4	25.9	54.7	275.2	54.0	329.2	383.9

Source: Department of Livestock

Table 8: Bangladesh: Feed status production, demand and gap

Type of Livestock	Current Production (MMT)	Existing Demand (MMT)	Demand Gap (MMT)	Latent Demand (MMT)	Total Demand (MMT)	Real gap (MMT)
Broiler	2.14	2.40	0.26	0.30	2.70	0.56
Layer	1.19	1.3	0.11	0.6	1.9	0.71
Cattle	0.07	0.08	0.01	0.20	0.10	0.03
Total	3.4	3.77	0.37	1.1	4.87	1.47

Source: Poultry industry market assessment-Bangladesh, US Soybean Export Council, 2017

Table 9: Bangladesh: Projected feed demand as per different sectors in poultry

Description	2014	2015	2020
	(MT/Year)	(MT/Year)	(MT/Year)
Total DOC (Broiler)/Yr	1,036,800	1,140,480	2,000,504
Layer DOC	1,664,832	1,831,315	3,212,290
Commercial Layer + Broiler	2,701,632	2,971,795	5,212,794
PS (Broiler)	357,500	393,250	689,796
PS (Layer)	27,300	30,030	52,675
GP	7,800	15,600	27,364
Total DOC (PS+ GP)	392,600	438,880	769,835
Total (Broiler +Layer + PS+ GP)	3,094,232	3,410,675	5,982,629
Others (Sonali, Fayoumi, cock, country, etc.)	309,423	341,068	598,263
Total	3,403,655	3,751,743	6,580,891

Source: Feed demand Table, BPICC, November 2014

Table 10: Bangladesh: Feed requirement of poultry and livestock

Animal Type	<b>Adult Cattle Unit</b>	Feed Requirement (Million MT)
Cattle	18,074	46.18
Buffalo	642	1.64
Sheep	241	0.62
Goat	1,945	4.97
Poultry	388	30.45
Total feed requirement		83.85

**Source:** FAO-APHCA regional workshop in Bangkok: 13-15 August 2013

Table 11: Bangladesh: Demand supply of feeds

Animal Type	Demand (MMT)			Supply (MMT)		
Animal Type	Total	Roughage	Concentrate	Total	Roughage	Concentrate
Cattle	46.18	32.33	13.85	13.46	11.47	1.99
Buffalo	1.64	1.15	0.49	0.32	0.25	0.07
Sheep	0.61	0.52	0.09	1.6	1.53	0.07
Goat	4.97	4.22	0.75	12.32	12.23	0.09
Poultry	30.45	0.06	30.39	4.4	0.79	3.61
All	83.85	38.28	45.57	32.1	26.27	5.83

Source: FAO-APHCA regional workshop in Bangkok: 13-15 August 2013

Table 12: Bangladesh: Typical feed formula for broiler pellet feed

Types of Raw materials and ingredients	% by quantity

Maize	60%
Soya	25%
Meat and Bone Meal	5%
Rice Polish (DOB)	3-5%
Oil	2%
DCP	1%
CaCO3	1.1%
Vitamin	2-5%
Minerals	0.2%
Methionin	0.2%
Lysine	0.1%
Toxin Binder	0.1%
Sodium bi Carbonate	0.1%

Source: Poultry industry market assessment-Bangladesh, US Soybean Export Council, 2017

Table 13: Bangladesh: Requirement of feed ingredients (Projected)

Ingredients	2014	2015	2020
(Quantity in feed)	(Million MT)	(Million MT)	(Million MT)
Corn/Maize (50-60%)	1.7 - 2.0	1.875 - 2.251	3.290 - 3.948
Meat & Bone meal (3-6%)	0.1 - 0.2	0.112 - 0.225	0.197 - 0.394
Soybean (25-30%)	0.85 - 1.0	0.937 - 1.125	1.645 - 1.974
DDGS (3-5%)	0.1 - 0.17	0.112 - 0.187	0.197 - 0.329
Seed Oil (1-2%)	0.034 - 0.068	0.037 - 0.075	0.065 - 0.131
DORB (3-5%)	0.1 - 0.17	0.112 - 0.187	0.197 - 0.329
Rice polish/bran (4-6%)	0.136 - 0.204	0.150 - 0.225	0.263 - 0.394
Limestone (1-2%)	0.034 - 0.068	0.037 - 0.075	0.065 - 0.131
Medicine (2-2.5%)	6.80 - 8.50	0.075 - 0.930	0.131 - 0.197
Oilseed cake (2-3%)	0.068 - 0.120	0.075 - 0.112	0.394
Others (6%)	0.24	0.225	0.394

**Source:** Feed requirement table, BPICC, November 2014

Table 14. Bangladesh: Production of fisheries sector

Fiscal Year	Capture (MMT)	Culture (MMT)	Marine (MMT)	Fish (MMT)	Growth (%)
2005-06	0.93	0.92	0.48	2.33	5.08
2006-07	0.98	0.98	0.49	2.44	4.79
2007-08	1.03	1.04	0.50	2.56	5.05
2008-09	1.09	1.10	0.51	2.70	5.39
2009-10	1.03	1.35	0.52	2.90	7.32

2010-11	1.05	1.46	0.55	3.06	5.60
2011-12	0.96	1.73	0.58	3.26	6.54
2012-13	0.96	1.86	0.59	3.41	4.55
2013-14	1.00	1.96	0.60	3.55	4.04
2014-15	1.02	2.06	0.60	3.68	3.84
2015-16	1.05	2.20	0.63	3.88	5.27
2016-17	1.16	2.33	0.64	4.13	6.60

**Source:** Ministry of Fisheries and Livestock

Table 15: Bangladesh: Cultural method wise fish production

Productio	Production	Number	Are	ea	Produc	ction	MT/H	Growt
n Methods	Range	of Pond	Ha	%	MT	%	a	h rate
								(%)
Extensive	<1.5MT/Ha	401,384	45,246	12.15	59,833	3.71	1.322	-23.04
Semi	1.5-4	1,325,67	230,75	61.96	765,383	47.44	3.317	6.68
Intensive	МТ/На	0	3					
Intensive	4>10MT/H	389,022	84,878	22.79	503,131	31.19	5.928	6.60
	a							
Highly	10 >	51,027	11,521	3.09	284,893	17.66	24.729	10.01
Intensive	МТ/На							
Total	•	2,167,10	372,39	100.0	1,613,24	100.0	4.332	5.71
		3	7	0	0	0		

Source: Department of Fisheries and Bangladesh Bureau of Statistics

Table 16: Bangladesh: Aquaculture feed production, demand and gap analysis

Aqua Type	Current Production (MMT)	Existing Demand (MMT)	Demand Gap (MMT)	Latent Demand (MMT)	Total Demand (MMT)	Real gap (MMT)
Fish	1.287	1.38	0.1	1	2.38	1.093
Shrimp	0.143	0.15	0.01	0.12	0.27	0.127

Total	1.43	1.53	0.11	1.12	2.65	1.22
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Source: Aquaculture industry market assessment-Bangladesh, US Soybean Export Council, 2017

**Table 17. Bangladesh: Protein production** 

Fiscal	Milk	Meat	Egg
Year	Million MT	Million MT	Billion
2007-08	2.65	1.04	5.6532
2008-09	2.29	1.08	4.6961
2009-10	2.37	1.26	5.7424
2010-11	2.95	1.99	6.0785
2011-12	3.46	2.33	7.3038
2012-13	5.07	3.62	7.6174
2013-14	6.092	4.521	10.168
2014-15	6.97	5.86	10.9952
2015-16	7.275	6.152	11.9124
2016-17	9.283	7.154	14.9331
Growth Rate (%)	16	24	12

Source: Ministry of Fisheries and Livestock

Table 18: Bangladesh: Protein demand and gap

Products	Unit	Demand*	Production	Availability	Deficiency
Milk	Million MT	14.865	9.283		5.582
	Ml/day/head	250		15.797	
Meat	Million MT	7.135	7.154		-0.19
	Gm/day/head	120		121.74	
Egg	Billion	16.9416	14.9331		2.0085
	Numbers/year/head	104		92.75	

<sup>\*</sup>Estimated population of the country: 16 crores 29 lakhs (As on 1st July, 2017)

Table 19: Bangladesh: Growth of GDP and contributed sector

FY	GDP Growth (%)	Agriculture and Forestry (%)	Crops and Forestry (%)	Animal Farming (%)	Forest and Related Service (%)	Fisheri es (%)
200	6.67	5.44	6.17	2.15	5.46	5.75

5-06						
200 6-07	7.06	6.04	7	1.99	5.5	9.41
200 7-08	6.01	3.87	3.98	2.21	5.26	7
200 8-09	5.05	3.09	2.83	2.35	5.54	4.94
200 9-10	5.57	6.55	7.57	2.51	5.34	4.6
201 0-11	6.46	3.89	3.85	2.59	5.56	6.69
201 1-12	6.52	2.41	1.75	2.68	5.96	5.32
201 2-13	6.01	1.47	0.59	2.74	5.04	6.18
201 3-14	6.06	3.81	3.78	2.83	5.01	6.36
201 4-15	6.55	2.45	1.83	3.08	5.08	6.38
201 5-16	7.11	1.79	0.88	3.19	5.12	6.11
201 6-17	7.28	1.96	0.96	3.31	5.6	6.23

Table 20. Bangladesh: Industrial sector's GDP contribution growth

FY	GDP Growth Manufacturing (%)		Large and Medium scale (%)	Small scale (%)
2005- 06	6.67	10.81	11.24	9.14
2006- 07	7.06	10.54	10.8	9.48
2007- 08	6.01	7.33	7.38	7.15

2008- 09	5.05	6.69	6.54	7.3
2009- 10	5.57	6.65	6.27	8.17
2010- 11	6.46	10.01	11.11	5.67
2011- 12	6.52	9.96	10.76	6.58
2012- 13	6.01	10.31	10.65	8.81
2013- 14	6.06	8.77	9.32	6.33
2014- 15	6.55	10.31	10.7	8.54
2015- 16	7.11	11.69	12.26	9.06
2016- 17	7.28	10.97	11.2	9.82

Table 21: Bangladesh: Development indicator's progress

	Inve	estment (	<b>%</b>				
		GDP) Per Capita Power Generation				Food Grain	Average
FY	Pu bli c	Pri vat e	To tal	Income (US\$)	Capacity (Megawatt)	Production (lakh MT)	Inflation
200			26				
5-	5.5	20.	.1				
06	6	58	4	543	5245	272.7	
200			26				
6-	5.0	21.	.1				
07	9	08	7	598	5202	280.6	9.4
200							
7-		21.	26				
08	4.5	7	.2	686	5305	352.9	12.3
200			26				
8-	4.3	21.	.2				
09	2	89	1	759	5719	347.1	7.6
200			26				
9-	4.6	21.	.2				
10	7	57	4	843	5823	358.1	6.8
201			27				
0-	5.2	22.	.4				
11	6	16	2	928	7264	360.7	10.9
201	5.7	22.	28	955	8716	368.8	8.7

1-	6	5	.2				
12			6				
201			28				
2-	6.6	21.	.3				
13	4	75	9	1054	9151	372.7	6.8
201			28				
3-	6.5	22.	.5				
14	5	03	8	1184	10416	381.7	7.4
201			28				
4-	6.8	22.	.8				
15	2	07	9	1317	11534	384.2	6.4
201			29				
5-	6.6	22.	.6				
16	6	99	5	1465	14429	390	5.9
201			30				
6-	7.2	23.	.2				
17	6	01	7	1602	15379	396.9	5.4

Table 22: Bangladesh: Demographic development

F Y	Popula tion (Millio n)	Populatio n Growth Rate (%)	Life Expecta ncy (Year)	Upper Poverty Line, Head Count (%)	Lower Poverty Line, Head Count (%)	Literacy Rate (7+ yrs) (%)	Infant Mortality Rate (per thousand live birth)
2 0 0 7	141.8	1.47	66.66	36.8	22.6	56.1	43
2 0 0 8	143.8	1.45	66.8	35.1	20.98	55.8	41
2 0 0 9	146.7	1.36	67.2	33.4	19.3	56.7	39
2 0	140.6	1.36	67.7	31.5	17.6	56.8	36

1 0							
2 0 1 1	148.7	1.37	69	29.9	16.5	55.8	35
2 0 1 2	152.7	1.36	69.4	28.5	15.4	58.8	33
2 0 1 3	154.7	1.37	70.4	27.2	14.6	57.2	31
2 0 1 4	156.8	1.37	70.7	26	13.8	58.6	30
2 0 1 5	158.9	1.37	70.9	24.8	12.9	63.6	29
2 0 1 6	160.8	1.36	71.6	23.2	12.1	71	28

Table 23. Bangladesh: Tariff rate changes on select agro products

Sl. No.	Description	<b>Existing Rate</b>	Proposed Rate
1	Soya beans meals	CD-10%	CD-0%, RD-10%
2	Manioc (cassava) starch	CD-5%	CD-15%
3	Other starches	CD-5%	CD-15%
4	Other soya beans meals	CD-5%	CD-10%
5	Oil-cake and solid residues	CD-0%	CD-5%
6	Oil-cake of cotton seeds	CD-0%	CD-5%
7	Oil-cake of linseed	CD-0%	CD-5%
8	Oil-cake of sunflower seeds	CD-0%	CD-5%
9	Oil-cake of coconut or copra	CD-0%	CD-5%
10	Oil-cake of palm nuts or kernels	CD-0%	CD-5%

Note: Customs Duty (CD): Levied on imports charged under the Customs Act, 1969
Supplementary Duty (SD): Levied on items listed under the Value Added Tax (VAT) Act,

1991.

**Regulatory Duty:** Levied at a flat rate of 3% of assessable value for those items where SRD-CD is 25%

Source: Budget Speech FY 2017-18 and National Board of Revenue

Table-24: Bangladesh – Increased custom duty

Sl. No.	H.S. Code	Description of goods	<b>Existing Rate (%)</b>	Proposed Rate (%)
1	0904.21.90	Other dried or neither crushed or ground	5	10
2	1108.14.00	Manioc (cassava) starch	5	15
3	1108.19.00	Other starches	5	15
4	1208.90.00	Other soya beans meals	5	10
5	1211.90.19	Other plants and parts of plants	5	10
10	2305.00.00	Oil-cake and solid residues	0	5
12	2306.20.00	Of linseed	0	5
13	2306.30.00	Of sunflower seeds	0	5
14	2306.49.00	Other	0	5
15	2306.50.00	Of coconut or copra	0	5
16	2306.60.00	Of palm nuts or kernels	0	5
17	2306.90.00	Other	0	5
18	2309.90.90	Poultry feed finished	5	10

Table 25: Bangladesh: Tariff structure oilseed in budget FY 2016/17

HS Code	Items	CD	SD	VAT	AIT	RD	ATV	TTI
12019010	Soya beans, whether or not broken other than	0	0	15	5	0	4	25.07
	Seed, Wrapped/canned up to 2.5 Kg							
12019090	Soya beans, whether or not broken other than	0	0	0	0	0	0	0
	Seed, EXCL. Wrapped/canned up to 2.5 Kg							
120810	Soya Bean Flours And Meals	0	0	0	5	0	4	10.07
15071000	Crude Soya Bean Oil/Fraction Refine, Whether	0	0	15	0	0	4	20.07
	or Not Degummed							
15079010	Refined Soya-Bean Oil	0	0	15	0	0	4	20.07
15079090	Other Soya-Bean Oil	5	0	15	0	0	4	26.07
23040000	Oil-Cake And Other Solid Residues, Of Soya-	0	0	0	0	10	4	15.57
	Bean Oil							
15111010	Crude palm oil imported by VAT registered	10	0	15	0	0	4	32.07
	edible oil refinery industries							
15111090	Crude palm oil imported by other than VAT	10	0	15	0	0	4	32.07
	registered edible oil refinery industries							
15119011	Rbd Palm Stearin	10	0	15	5	0	4	37.07
15119019	Solidified Or Hardened By Mechanical	25	0	15	5	3	4	58.69
	Treatment(Excl. Rbd Palm Stearin)							

15119090	Palm Oil (Exclude) & Its Fractns. Nes. Incld.	0	0	15	0	0	4	20.07
	Refined Palm Oil							

Note: CD – Custom duty, SD – Supplementary duty, VAT – Value added tax, AIT – Advance Income Tax RD – Regulatory duty, ATV – Advanced Trade VAT, TTI – Total tax incidence