USDA Foreign Agricultural Service
GAIN Report
Global Agricultural Information Network

Required Report - public distribution

Date: 3/20/2019
GAIN Report Number: BG 1902

Bangladesh

Oilseeds and Products Annual

2019

Approved By:
Mark A. Myers, Agricultural Attaché

Prepared By:
Tanvir Mahmud, Agricultural Specialist

Report Highlights:
In marketing year (MY) 2019/20 (July to June), soybean area and production are forecast to increase to 82,000 hectares (HA) and 158,000 metric tons (MT) assuming favorable weather conditions. MY 2019/20 soybean imports are expected to rise to 1.35 million MT as a result of high soymeal demand to meet feed requirements for the livestock and fisheries sectors, and soybean oil for human consumption.

Soymeal production and imports in MY 2019/20 (July to June) are forecast to increase to 1.09 MMT and 600,000 MT respectively, assuming continued demand in the feed industry. For MY 2019/20, Post's edible oil imports forecast is raised to 2.8 MMT assuming continuing population increase, changing consumer behavior to dining out, increasing urbanization, and an increase in bakery and processed food production. Meeting the protein demand of an increased population with changing consumption patterns is the key driving force behind livestock and fisheries development. As well, oilseed demand is increasing as a result of the booming poultry sector, as it is rapidly developing with a target of becoming an exporting country by 2024.

Commodities:

Oilseed, Soybean

Production:

Soybean area and production forecast in MY 2019/20 (July-June) are slightly higher compared to MY 2018/19. Post's soybean cultivation area forecast is raised to 82,000 hectares (HA) in MY 2019/20, assuming revived farmers' interest in planting. Assuming normal weather conditions during the planting and growing stage, and static average yield, soybean production is forecast to increase by 5.33 percent to 158,000 MT in MY 2019/20 due to increased forecasted area compared to MY 2018/19.

Soybean in MY 2018/19 shows an increased cultivation area compared to MY 2017/18, although it failed to achieve the target fixed by the Government of Bangladesh (GOB). Soybeans in MY 2018/19 were planted in January-February, 2019 and will be harvested by April-May, 2019. Post estimates a 4.88 percent reduction in cultivated area to 78,000 hectares compared to USDA official estimates in MY 2018/19. Post estimates 3.85 percent lower production to 150,000 MT in MY 2018/19 compare to USDA official estimates due to reduced cultivated area and crop loss owing to seed germination failure after planting.

Farmers switched to other *rabi* season (cropping season from October 16 to March 15) crop cultivation, especially watermelon in the island areas with an expectation of a higher price, lower risk of crop loss from weather irregularities, a shortage of quality seed for planting, and lack of trust in seed supplied by the public seed supplier, Bangladesh Agricultural Development Corporation (BADC).

In MY 2017/18, post revised area harvested and production estimates downward to 76,000 HA and 120,000 MT based on revised estimates from the GOB's Department of Agricultural Extension, Ministry of Agriculture.

In MY 2017/18, among oilseeds in Bangladesh, soybeans account for only 10.5 percent of total oilseed planted area. Mustard dominates with 65%, followed by sesame, groundnuts, and others (sunflower, linseed) at 11.5%, 11.3%, and 1.7% respectively.

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

Poor soil and competing crops limit available area for soybean cultivation. Soybean competes with crops like winter rice (*Boro* season rice), watermelon, and groundnuts 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 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. Lower production costs, coupled with favorable market prices, give farmers a premium for soybeans, watermelon, and groun nuts compared to *Boro* rice.

Consumption:

In MY 2019/20, soybean crushing is expected to increase by 7.41 percent to 1.45 million MT due to gradual increased capacity of millers to meet the rising demand of soymeal for feed industries, and the increasing demand for animal protein and soybean oil for human consumption and edible oil export to India. 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. Crush estimates in MY 2018/19 are revised up to 1.35 MMT due to increased soybean oil export to India in the first quarter of MY 2018/19.

Human consumption as a grain, or any other non-oil form, is estimated at 6,000 MT in MY 2019/20, driven by production of various soy-based processed foods and food supplements in relation to raised health consciousness by consumers.

Trade:

Soybean imports in MY 2019/20 are projected to rise 3.85 percent to 1.35 MMT assuming increased demand both for raw materials use in animal feed, and for soybean oil use in food products. In MY 2018/19, import estimates are revised to 1.3 MMT on strong demand in the crushing industries.

U.S. soybeans are dominant in import share (99%) in the period July-December, 2018. Although during last MY 2017/18, U.S. soybean share was down to 88 percent, and competed with Brazil (6.3%) and Canada (5.63%).

The country's soybean import was bullish in the first quarter of MY2018/19 when the Bangladesh government permitted the export of edible oil to India. To protect the interests of local refiners and farmers, India raised the import duty on refined palm oil in March 2018 to 59.4 percent, and on crude and refined soybean oil, sunflower oil, and canola oil in June 2018 to 38.5% percent. Bangladesh began exporting refined, bleached, and deodorized (RBD) palm olein and refined soybean oil in July 2018 duty free via the "South Asian Free Trade Agreement" (SAFTA). According to SAFTA, duty free goods from a country are allowed if either the commodity is native to the country, or has a 30 per cent value addition. After exporting 40,000 MT of oil, India imposed a de facto ban on duty free import of edible oil from Bangladesh by refusing import clearances which has adversely affected exports. Edible oil export from Bangladesh stood at US$87.64 million during July-December of MY 2018/19, compared to US$13 million in last MY 2017/18.

Commodity:
Oil Meal: Soymeal

Production:

Domestic soymeal production is progressing as soybean seed imports are increasing and milling capacity of crushing plants are also growing. 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. In MY 2019/20, Post forecasts soymeal production to surge by 7.43 percent to 1.09 MMT, driven by growing demand in the feed industry. Soybean imports pushed revised estimates of soymeal production up to 1.01 MMT in MY 2018/19.

Since imported soybeans are fully crushed to produce meal and oil, the surge in imports of soybeans 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 have enabled soybean crushing plants to increase soymeal production.

Consumption:

Expansion of the livestock and fisheries sectors has created further demand for soymeal which is supplied by both domestic production and import. In MY 2019/20, soymeal usage is projected to grow 6.25 percent to 1.7 MMT, assuming a normal pace in soymeal use for feed in the poultry, aquaculture, and livestock sectors. Soymeal usage is estimated to rise to 1.6 MMT in MY 2018/19. Investment in the poultry sector is increasing as the sector ramps up to reach capacities needed to drive exports.

Trade:

Soymeal imports in MY 2019/20 are forecasted upward to 600,000 MT on expectation of high demand, owing to increased consumption in feed mill industries. Soymeal import estimates are revised down to 550,000 MT in MY 2018/19 following 65% lower imports in the first half of MY 2018/19 compared to MY 2017/18. As imported soybeans are crushed to produce meal and oil, the surge in soybean imports largely displaced imports of soymeal. In the first half of MY 2018/19, India led in exporting soymeal to Bangladesh with 93% share, followed by the U.S. (3.81%) and Brazil (3.77%).

Livestock and Fisheries Industries

The poultry sector is gearing up to export eggs and poultry meat by 2024, especially to the Middle East, a big market for halal meat. The sector has BDT 350 billion (US$4.16 billion) of investment and is expected to double in the next decade. Approximately one million entrepreneurs and eight million people are involved in the poultry sector. The poultry sector supplies 36% of total protein intake through meat and egg consumption. Yearly, 95 eggs are eaten per capita, while consumption of chicken stands at 6.5 kg. The annual commercial production of eggs and poultry meat are 10.22 billion eggs and 1.46 million tons respectively. The country will require 17 billion eggs, 2 million tons of poultry meat, 85.8 million day-old chicks, and 7.9 million MT of feed to meet demand by 2021.

Total poultry farms of all sizes number about 65-70,000 and are growing at the rate of 15% per year. Aquaculture farms number about 2 million, while the area under production (metric tons per hectare) is increasing at 5.7% per year.

Total feed demand is supplied by domestic feed industries (96%), followed by imported feed (2%), and homemade mix (2%). There are 203 GOB registered feed mills and more than 200 unregistered mills in the country, while 82 mills are members of the Feed Industries Association Bangladesh (FIAB). The investment in poultry feed production is about BDT 120 billion (US$1.4 billion). The fully automated feed mills, and other 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). A business researcher, Light Castle, reported that within the feed industry, feed for fattening cattle is expected to grow by 15.5 percent and dairy cattle feed by 11.5 percent by 2024.

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 (10-20 percent), and meat and bone meal (10-20 percent).

Commodity:

Oil: Soybean oil and Palm oil

Production: Soybean oil

Based on projected import and local soybean production, Post forecasts to raise soybean oil production to 260,000 MT in MY 2019/20. In MY 2018/19, soybean oil production estimates are raised to 240,000 MT due to increased soybean imports for higher levels of direct human consumption, industrial use demand, and partly for increased exports to India.

Post contacts reported that 80 oil refineries in Bangladesh have a total production capacity of 2.9 million MT, but they are utilizing only 48% of capacity. Excess capacity is available to supply the growing demand for edible oil.

Consumption: Soybean oil and Palm oil

Edible soybean and palm oils consumption is forecast to rise 9.76 percent to 3.1 MMT in MY 2019/20, with an assumption of increased population from normal growth rate, changing consumer behavior, increased oil use as an ingredient in various specialty foods such as baked goods, and fast food.

Post's edible oil (soybean and palm) consumption is estimated to rise by 9.13 percent to 2.8 MMT in MY 2018/19 due to increased human consumption and use in the baking industry, and fast food restaurants.

On March 15, 2018, wholesale prices for bulk soybean oil were BDT 83 - 88 (US$0.98 – 1.05) per liter; bulk retail soybean oil was selling for BDT 78- 83; super-palm (palm olein) was selling for BDT 66-70 per liter.

Per capita consumption of edible oil is 20-22 gm per day. 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 the food processing industry (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.

Minor edible oils such as mustard/rapeseed oil, rice bran oil, sesame oil, and sunflower oil are not included in this report. Mustard oil has a very limited use in households only to prepare local recipes. Rice bran oil, sunflower oil, and sesame oil production are limited (see Table 13). Due to some constraints in producing rice bran oil and sunflower cultivation, oil production and supply are not expanding, and do not appeal to consumer preference and taste.

Trade:

Soybean and palm oil imports are forecast to up to 950,000 MT and 1.85 MMT, respectively, in MY 2019/20 assuming increased consumption for home use and industrial uses in processed food production. Rising domestic consumption for diverse uses is estimated to prod imports up to 2.65 MMT in MY 2018/19. Soybean oil import is estimated at 900,000 MT, and for palm oil at 1.75 MMT. 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:

For FY 2018/19, the Government of Bangladesh (GOB) adopted a new tariff structure for importing soybean, soymeal, and edible oil (See Table 5).

The GOB has an open trade policy (no tariffs) for soybean and soybean oil. This duty free policy for soybeans is intended to support the local crushing industry to ensure a local supply of soymeal at a lower price. However, 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 leading domestic seed crushing plants. There are no quotas on import of oilseeds and related products. 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	2017/2018		2018/2019		2019/2020	
Market Begin Year	July 2017		July 2018		July 2019	
Bangladesh	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted	82	76	82	78	0	82
Area Harvested	82	76	82	78	0	82
Beginning Stocks	49	49	170	160	0	250
Production	156	120	156	150	0	158
MY Imports	1100	1176	1300	1300	0	1350
Total Supply	1305	1345	1576	1610	0	1758

MY Exports	0	0	0	0	0	0
MY Exp. to EU	0	0	0	0	0	0
Crush	1175	1175	1350	1350	0	1450
Food Use Dom. Cons.	5	5	5	5	0	6
Feed Waste Dom. Cons.	5	5	4	5	0	6
Total Dom. Cons.	1135	1185	1359	1360	0	1462
Ending Stocks	170	160	217	250	0	296
Total Distribution	1305	1345	1576	1610	0	1758
Yield	1.9024	1.5789	1.9024	1.9231	0	1.9268

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

Meal, Soybean	**2017/2018**		**2018/2019**		**2019/2020**	
Market Begin Year	**July 2017**		**July 2018**		**July 2019**	
Bangladesh	**USDA Official**	**New Post**	**USDA Official**	**New Post**	**USDA Official**	**New Post**
Crush	1175	1175	1350	1350	0	1450
Extr. Rate, 999.9999	0.7447	0.7447	0.7481	0.7481	0	0.7483
Beginning Stocks	124	124	217	217	0	173

Production	875	875	1010	1010	0	1085
MY Imports	642	642	530	550	0	600
Total Supply	1641	1641	1757	1777	0	1858
Industrial Dom. Cons.	0	0	0	0	0	0
Food Use Dom. Cons.	4	4	4	4	0	4
Feed Waste Dom. Cons.	1420	1420	1575	1600	0	1700
Total Dom. Cons.	1424	1424	1579	1604	0	1704
Ending Stocks	217	217	178	173	0	154
Total Distribution	1641	1641	1757	1777	0	1858

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

Oil, Soybean	**2017/2018**		**2018/2019**		**2019/2020**	
Market Begin Year	**July 2017**		**July 2018**		**July 2019**	
Bangladesh	**USDA Official**	**New Post**	**USDA Official**	**New Post**	**USDA Official**	**New Post**
Crush	1175	1175	1350	1350	0	1450
Extr. Rate, 999.9999	0.1787	0.1787	0.1778	0.1778	0	0.1793
Beginning Stocks	95	95	85	85	0	125
Production	210	210	240	240	0	260
MY Imports	780	780	780	900	0	950
Total Supply	1085	1085	1105	1225	0	1335
Industrial Dom. Cons.	110	110	120	130	0	140
Food Use Dom. Cons.	890	890	915	930	0	1050
Feed Waste Dom. Cons.	0	0	0	0	0	0
Total Dom. Cons.	1000	1000	1035	1060	0	1190
Ending Stocks	85	85	70	125	0	135
Total Distribution	1085	1085	1105	1225	0	1335

Table 4. Bangladesh: Commodity, Oil, Palm, PSD
(Area in 1000 hectares and production in 1000 metric tons)

Oil, Palm	**2017/2018**	**2018/2019**	**2019/2020**

Market Begin Year	July 2017		July 2018		July 2019	
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	196	196	0	156
Production	0	0	0	0	0	0
MY Imports	1635	1635	1750	1750	0	1850
Total Supply	1766	1766	1946	1946	0	2006
Industrial Dom. Cons.	120	120	140	140	0	150
Food Use Dom. Cons.	1450	1450	1600	1650	0	1700
Feed Waste Dom. Cons.	0	0	0	0	0	0
Total Dom. Cons.	1570	1570	1740	1790	0	1850
Ending Stocks	196	196	206	156	0	156
Total Distribution	1766	1766	1946	1946	0	2006

Table 5: Bangladesh: Tariff structure oilseed, soymeal and oil based on budget FY 2018/19

HS Code	Items	CD	SD	VAT	AIT	RD	ATV	TTI
12019010	Soya beans, whether or not broken other than Seed, Wrapped/canned up to 2.5 Kg	0	0	15	5	0	5	26.33
12019090	Soya beans, whether or not broken other than Seed, EXCL. Wrapped/canned up to 2.5 Kg	0	0	0	0	0	0	0
15071000	Crude Oil, Whether or Not Degummed	0	0	15	0	0	5	21.33
15079010	Refined Soya-Bean Oil	0	0	15	0	0		15
15079090	Other Soya-Bean Oil	5	0	15	0	0	5	27.4
23040000	Oil-Cake and Other Solid Residues, Of Soya-Bean Oil		0	0	0	5	5	11.4
15119011	Rbd Palm Stearin	10	0	15	5	0	5	38.47
15119019	Solidified Or Hardened By Mechanical Treatment(Excl. Rbd Palm Stearin)	25	0	15	5	3	5	60.31
15119090	Palm Oil (Exclude) & Its Fractions. Nes. Incld. Refined Palm Oil	0	0	15	0	0	5	21.33

Source: National Board of Revenue

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 3-5% of assessable value for those items where SRD-CD is 25%

Value Added Tax (VAT): VAT is imposed by VAT act 22 of 1991 at a flat rate 15% of "duty paid value" (assessable value plus customs duty plus regulatory duty plus supplementary duty)

Advance Income Tax (AIT): The AIT is levied under Rule 17A of Income Tax Ordinance, 1984 at a flat rate of 5% on assessable value.

Advance Trade VAT (ATV): ATV is applied only on commercial imports under "BidhiMala-2012" by SRO No. 242-Law/2012/659-VAT dated 28-06-2012 by Section 22, 5 (2), 6 (4) and 31 of VAT act 1991. ATV is levied at a flat rate of 5% on "VAT paid value"

Total Tax Incidence (TTI): Summation estimated duties

Table 6: Bangladesh: Livestock Population in Bangladesh

FY	Cattle	Buffalo	Sheep	Goat	Chicken	Duck	Total Poultry
Year	Million	Million	Million	Million	Million	Million	Million
2008-09	22.976	1.304	2.877	22.401	221.394	41.234	262.628
2009-10	23.051	1.349	2.977	23.275	228.035	42.677	270.712
2010-11	23.121	1.394	3.002	24.149	234.686	44.12	278.806
2011-12	23.195	1.443	3.082	25.116	242.866	45.7	288.566
2012-13	23.341	1.45	3.143	25.277	249.011	47.254	296.264
2013-14	23.488	1.457	3.206	25.439	255.311	48.861	304.172
2014-15	23.636	1.464	3.27	25.602	261.77	50.522	312.293
2015-16	23.785	1.471	3.335	25.766	268.393	52.24	320.633
2016-17	23.935	1.478	3.401	25.931	275.183	54.016	329.2
2017-18	24.086	1.485	3.468	26.1	282.145	55.853	337.998

Source: Department of Livestock, Ministry of Livestock and Fisheries

Table 7: Bangladesh: Demand, production, availability and deficiency of milk, meat and eggs (2017-18)

Product	Unit	Per Capita Requirement	Availability	Unit	Demand	Production	Deficiency	Surplus
Milk	ml/day/head	250	158.19	Mill MT	15.03	9.41	5.62	
Meat	gm/day/head	120	122.1	Mill MT	7.21	7.26	0	0.05
Egg	number/year/ head	104	95.27	Billion	17.13	15.52	1.61	

Source: Department of Livestock, Ministry of Livestock and Fisheries

Table 8: Bangladesh: Feed Status (Production, Demand) in Bangladesh

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 (MT/Year)	2015 (MT/Year)	2020 (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: Requirement of Feed Ingredients (Projected)

Ingredients (Quantity in feed)	**2014 (Million MT)**	**2015 (Million MT)**	**2020 (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 11: 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%
Methionine	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 12: 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

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

Table 13. Bangladesh Edible oil consumption pattern

Oil Type	2013	2014	2015	2016	2017	2018
	Thousand MT	Thousand MT	Thousand MT	Thousand MT	Thousand MT	Thousand MT
Palm oil	1220	1266	1303	1394	1455	1740
Soybean oil	466	593	699	849	1008	1030
Canola/Mustard oil	113	100	140	174	154	142
Palm kernel oil	8.3	15	19	17	18	19
Coconut oil	28	23	18	26	32	28
Ghee/Butter	29	29	31	32	32	34
Sunflower oil	0.7	1.2	1.4	1.6	4	14
Others	1.9	1.8	2.5	1.4	1.5	4
Total	1866.9	2029	2213.9	2495	2704.5	3011

Source: Oil World.