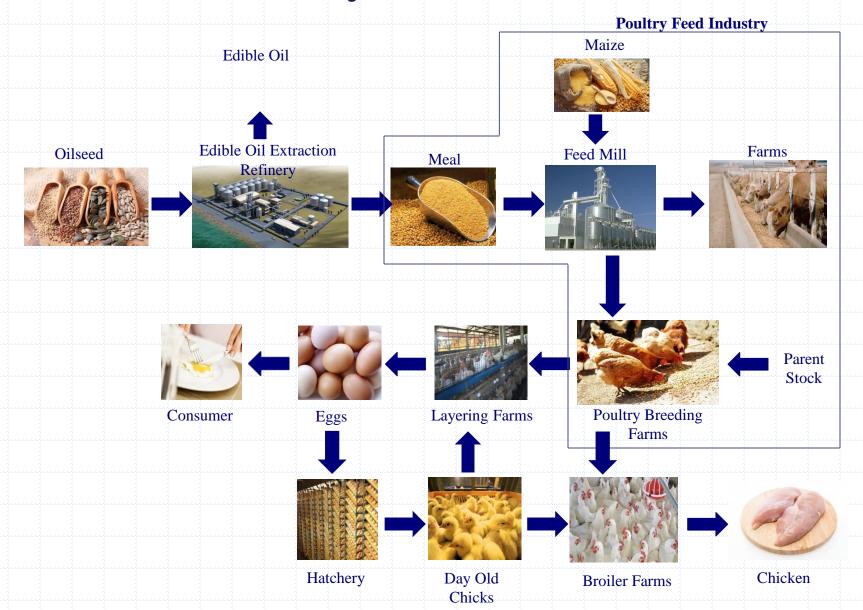


Food & Allied

Poultry Feed Industry



Industry | Process Flow





Industry | Inputs and Outputs

Inputs

- Maize
- Soybean and other edible oilseeds meal
- Vitamins & Medicinal premix

Outputs

Feed variants

Types

- Starter feed
- Grower feed
- Layer feed
- Broiler feed

Forms

- Mash
- Crumbles
- Pellets





Industry | Global Dynamics

- Global feed industry value ~ \$ 460bln
- Poultry feed is 36% of total feed industry ~ \$ 166bln

Region	Layers	Broilers	Turkey	Others	Total	Regional Share
Middle East	6	9	0.3	0.2	15	3%
Africa	9	11	0.2	0.1	20	4%
North America	14	51	7	0.2	72	16%
Latin America	21	62	1	0.1	84	19%
Europe	29	48	6	4	86	19%
Asia-Pacific	66	106	0.2	3	175	39%
Total	143	287	15	7	452	100%
Share %	32%	64%	3%	1%	100%	-

Mln MT

Growth & Production:

- Africa fastest growth in feed production ~ 5%
- USA & China Combined production ~ 1/3rd of global production
- Asia-Pacific lead in production ~ 395MT, growth ~ 3%
- India 39MT, Japan 24MT
- Vietnam and Pakistan up coming players





Poultry Feed | Layer

- Bird's weight associated with feed consumed per day
- Diet optimizes egg production number and size of eggs
- Peak of laying ~ 32 weeks
- Feed consumed per day as per bird's age (in grams):

Age	Feed Consumption (g/day)				
Week 1- 17	13-80				
Week 18 onwards	100-105				

• Type of feed consumed as per bird's age:

~-	Starter	Grower	Pre-layer	Egg Laying Starts	Layer Till Peak	Layer Post Peak
Layer	8 weeks	8-16 weeks	16-18 weeks	18 weeks	18-32 weeks	after 32 weeks







Poultry Feed | Broiler

- Feed for broiler destined to be sold as whole bird or in pieces will differ from broiler feed destined to be sold for boneless meat
- Ideal nutrient density ~ 1.5 kg per day consumed by 1 kg bird
- Feed consumed per day as per bird's age (in grams):

Age	Feed Consumption (g/day)				
Week 1-5	10 - 100				
Week 5-9	100 - 200				

• Type of feed consumed as per bird's age:

	Starter	Grower	Finisher	Total Cycle
Broiler	0-2 weeks	2-4 weeks	last 10 days	35-45 days





Poultry Feed | Inputs

- Composition of feed is a very sensitive area, wrong proportion can lead to massive losses
- 20 to 25 ingredients used in poultry feed variants
- Maize and Soybean meal | key ingredients in terms of weight and cost

Sample inclusion percentage of ingredients and cost of feed variant

Indgrediants	% of Feed Mix	Cost of Ingredient (PKR/kg)		Cost as % of Feed Mix (PKR/kg)			
		FY17	FY18	FY19	FY17	FY18	FY19
Maize	50%	24	29	35	12	15	18
Soyabean Meal	28%	52	58	63	15	16	18
Rice Polish	10%	18	18	18	2	2	2
Fish Meal	3%	61	61	61	2	2	2
Sunflower Meal	3%	34	34	34	1	1	1
Medical Premix	3%	-	-	-	0	0	0
Poultry By-Product Meal	2%	59	59	59	1	1	1
Limestone Powder / Granular	1%	3	3	3	0.03	0.03	0.03
Total	100%	251	262	273	33	37	41



Input | Price Dynamics

Maize

Global Dynamics

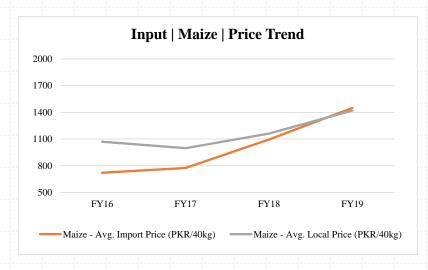
- World's Total Production | Pakistan's share | 0.6%
- Global Average Maize Price | \$ 0.52 per kg
- Price Volatility | +/- 2.3%

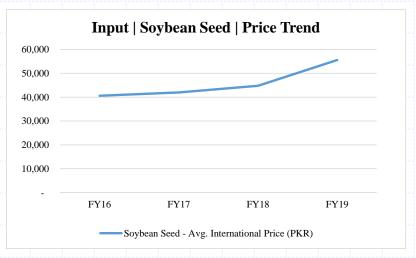
Local Dynamics

Maize Prices | Escalated by 22%

Soybean

- Decline in International Soybean prices
 - Rise in PKR due to devaluation







Input | Production Dynamics

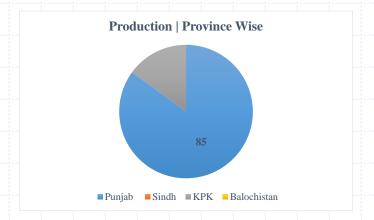
Maize

Global Dynamics

• World's Total Production | Pakistan's share | 0.6%

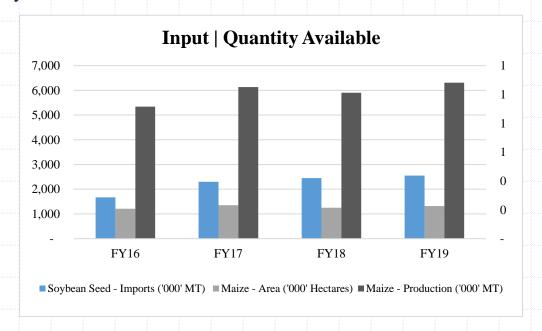
Local Dynamics

- Highest Production Contribution | Punjab |
 85%
- During FY19
 - Cultivation area | Up by 5 %
 - Production | Up by 7 %



Soybean

- Import based market
- Import tilt | Soybean seed





Market Share | Local Players

- Registered Feed Mills | 150
- Unregistered Feed Mills | 200
- FY19 | Total Feed Production | 8 MMT
- Current Market Share in the table below:

No.	Client	Capacity (MT)
1	Sadiq Feeds	1,664,000
2	Islamabad Feeds	500,000
3	Asia Poultry Feed	420,000
4	Hi-Tech Feeds	396,000
5	National Feeds	384,000
6	Big Feeds	336,000
7	Supreme Feeds	336,000
8	Capital Feeds	285,120
9	Sharif Feeds	252,000
10	Lahore Feeds	252,000
	Total	5,077,120
	Industry Capacity	8,000,000



Regulatory Structure

	Previous	New
Sales Tax (Soybean Meal)	10%	17%
Sales Tax - Sunflower meal, rapeseed meal and Canola meal	Exempt	Exempt
	Feeds	
Sales Tax (Poultry feed)	Exempt	Exempt
Minimum Tax	0.5%	0.75%

- Import from China | Free Trade Agreement | Duty exempted
- UAE Govt. lifted import ban for Pakistan's poultry industry



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