Cotton Seed Oil Cake

Cottonseed meal, a leading protein supplement, provides necessary proteins for animal maintenance, growth and development and also conserves available supplies of grain and roughages. Cotton seed meal has six times protein of most grains and 10 to 20 times that of lower quality roughages. One pound of cotton seed meal will save two and a half to three pounds of grain. In addition to its high protein content and high energy value, cottonseed meal is higher in phosphorous than any of the other vegetable proteins. Cottonseed meal may be used to some extent in the rations of all classes of livestock. It is sufficient as a sole source of protein for mature ruminants such as beef cattle and sheep and can provide much of the protein for dairy cows. Since it is a natural protein source its nitrogen is effectively utilized and there is little danger of excess ammonia being produced in the rumen or stomach of these cud-chewing animals as sometimes occurs when feeding synthetic protein materials. High quality cottonseed meal, used correctly as an ingredient of properly formulated swine and poultry rations, improves economy and efficiency.

Global Production Trends in Cotton & Cotton Meal

The cotton production in the world has reflected some interesting trend over the last decade. India has overtaken China as the leading producer of cotton with global share of 25.92 per cent against Chinese share of 25.08 per cent. China still is the leading consumer of cotton in world (32.97 per cent). In the current year the pressure of ending stock on China is huge (it has about 60 per cent of the global ending stock) which is expected to keep the global prices under check.

Country Wise Cotton Production

Country	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Production 1000 (480 lb.) Bales										
India	19,050	22,500	24,700	23,300	24,500	27,200	29,000	28,500	31,000	31,000
China	28,400	35,500	37,000	36,700	32,000	30,500	34,000	35,000	32,750	30,000
United States	23,890	21,588	19,207	12,825	12,183	18,102	15,573	17,314	12,909	16,397
Pakistan	9,850	9,580	8,550	8,540	9,240	8,640	10,600	9,300	9,500	9,800
Brazil	4,700	7,000	7,360	5,480	5,450	9,000	8,700	6,000	8,000	7,000
Uzbekistan	5,550	5,350	5,350	4,600	3,900	4,100	4,200	4,500	4,100	4,000
Australia	2,750	1,350	625	1,525	1,775	4,200	5,500	4,600	4,100	2,200
World	116,358	123,015	120,570	108,296	103,369	117,640	127,280	123,561	120,308	119,608
Domestic Consumption 1000 480 lb. Bales										
China	43,500	48,000	48,500	42,750	50,000	46,000	38,000	36,000	34,500	37,500
India	16,700	18,100	18,600	17,750	19,750	20,550	19,450	20,850	23,000	24,500
Pakistan	11,525	12,025	12,025	11,125	10,425	9,925	10,025	10,775	10,425	10,625
Brazil	4,302	4,423	4,450	4,050	4,250	4,150	3,850	3,950	4,050	3,950
United States	5,671	5,238	5,013	3,278	3,536	4,082	3,128	3,848	3,742	3,757
Uzbekistan	800	900	1,000	1,000	1,100	1,250	1,350	1,450	1,500	1,450
Australia	-115	-45	-50	-55	-85	-210	-185	-160	-160	-65
World	115,244	122,504	121,796	108,936	119,767	115,787	103,653	106,751	108,573	113,724
Ending Stocks 1000 480 lb. Bales										
China	22,536	20,536	20,504	21,366	14,246	10,603	31,081	50,361	62,707	62,157
India	7,839	7,829	7,029	11,019	9,699	11,799	10,869	11,969	11,319	13,619
Brazil	3,616	5,408	6,251	4,992	4,353	7,906	7,993	5,801	7,668	7,393
United States	6,069	9,479	10,051	6,337	2,947	2,600	3,350	3,800	2,450	5,100
Pakistan	4,597	4,240	4,403	3,378	3,042	2,520	2,835	2,710	2,475	2,700
Uzbekistan	1,248	1,198	1,348	1,948	948	1,148	1,498	1,348	1,248	1,498
Australia	2,003	1,269	725	1,104	852	2,762	3,807	2,399	1,807	1,072
World	61,801	63,103	62,362	62,226	47,383	50,608	73,697	90,014	101,476	107,360

Source: Foreign Agricultural Service, Official USDA Estimates

For the year 2014-15, world projections include higher beginning and ending stocks, equivalent increases in production and consumption, and a decline in world trade. Beginning stocks are raised due mainly to a higher China import forecast for 2013-14 and higher 2013-14 production for India. Compared to last year, the Chinese production is expected to decline by 8.40 per cent, owing to unfavourable weather conditions. Significant improvement is noticed in case of US cotton which is expected to improve by 27.02 per cent and significant decline is expected in case of Australia and Brazil with a decline of 46.34 per cent and 23.85 per cent respectively. The global consumption is likely to improve marginally by 4.74 per cent.

The world production of cotton seed cake is likely to remain almost at the same levels to the last year with marginal improvement to 15600 thousand MT against the production of 15511 thousand MT in 2013-14 (a rise of 0.57 per cent). In India the production of cotton seed cake is expected to improve marginally to 4520 thousand MT from 4260 thousand MT (an improvement of 6.10 per cent). The details of the global production, Consumption and ending stock of cotton seed cake across the world are given in the following table:

Country Wise Cotton Seed Cake Production

Country	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Production (1000 MT)										
India	2,800	3,090	3,480	3,380	3,429	3,750	3,940	3,990	4,260	4,520
China	3,965	4,670	4,875	4,766	4,368	4,206	4,403	4,672	4,462	4,159
Pakistan	1,767	1,629	1,545	1,475	1,605	1,568	1,690	1,700	1,700	1,700
Brazil	740	1,045	1,130	948	972	1,350	1,350	1,030	1,178	1,130
United States	1,245	1,126	1,145	851	801	1,055	989	1,021	816	989
Uzbekistan	870	873	880	702	632	622	665	679	660	655
Australia	241	156	126	124	176	298	313	313	313	279
World	14,470	15,219	15,506	14,221	13,810	14,832	15,637	15,638	15,511	15,600
Domestic Consumption (1000 MT)										
India	2,794	3,084	3,475	3,379	3,425	3,694	3,927	3,957	4,225	4,485
China	3,930	4,630	4,820	4,687	4,286	4,185	4,338	4,578	4,412	4,129
Pakistan	1,730	1,675	1,605	1,475	1,579	1,594	1,635	1,685	1,725	1,775
Brazil	723	1,040	1,135	948	970	1,350	1,350	1,035	1,180	1,125
United States	1,111	1,028	1,043	804	696	979	891	918	736	894
Uzbekistan	825	831	838	683	610	592	635	640	639	625
Australia	231	148	113	116	147	250	265	278	258	240
World	14,436	15,320	15,586	14,251	13,725	14,907	15,524	15,575	15,578	15,728
Ending Stocks (1000 MT)										
United States	54	56	50	16	49	41	45	45	45	46
Pakistan	171	125	65	65	91	65	120	135	110	35
Brazil	11	16	11	11	12	12	12	7	5	10
Uzbekistan	0	0	12	0	0	0	0	9	0	0
Australia	0	0	0	0	0	8	15	0	0	0
World	294	220	153	117	197	186	206	201	169	103

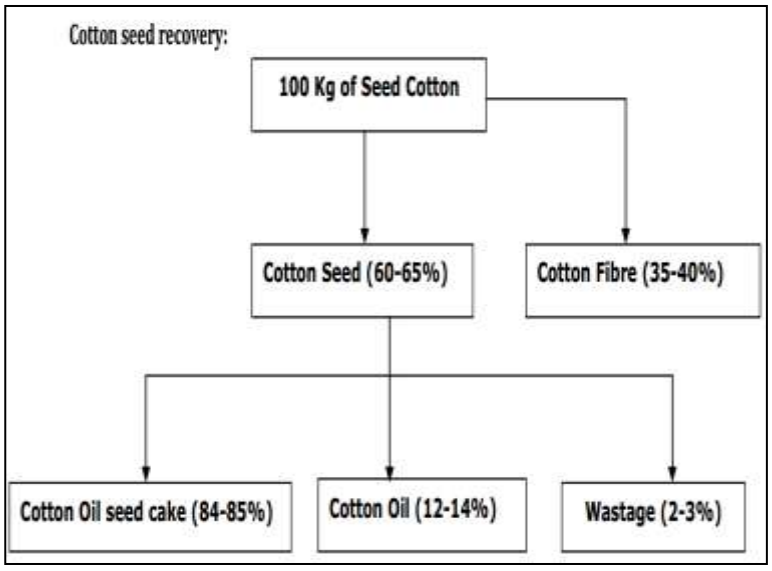
Source: Foreign Agricultural Service, Official USDA Estimates

State-wise Harvesting Seasons of Cotton in India

States	Harvesting Seasons	Contribution
Andhra Pradesh	Jan-May	16.30%
Gujarat	Nov-Mar	31.69%
Haryana	Sept-Dec	4.30%
Karnataka	Oct-April	3.08%
Madhya Pradesh	15th Oct-Feb	5.24%
Maharashtra	Nov-April	25.23%
Punjab	Sept-Dec	4.92%
Rajasthan	Oct-Dec	2.76%
	Jan-Aug	
Tamil Nadu	Oct-Dec	1.53%
Uttar Pradesh	Sept-Jan	Meager
India	Sept-April	-

Cotton is grown in different seasons across the world which has led to arrivals of cotton through out of the day. Season begins in India from June – July and ends in December. However, arrivals continue till February-March. Cotton is mostly grown as Kharif crop in Punjab, Haryana, Rajasthan, Gujarat, Maharashtra, Madhya Pradesh, Karnataka and Andhra Pradesh but in Tamil Nadu it is grown as a summer crop. Major Cotton producing states in India are Gujarat, Maharashtra, Madhya Pradesh and Andhra Pradesh. Sowing seasons in these countries as crop is grown in rain fed conditions in few and irrigated conditions in few others. Thus arrivals of cotton start first from the northern regions like Punjab, Haryana, Rajasthan Gujarat U.P, M.P followed by the southern regions. Major markets of cotton across India are scattered across these growing regions which has resulted in large scale development of textile industry due to wide spread availability of the raw materials. Cotton production in India is not just restricted for fiber purpose but also the seed is crushed into meal and used for cattle feed purposes. Cotton seed oil is used for different edible purposes after fine refining. The recovery of the cotton seed from cotton is different in different varieties while a minimum of 60-65 per cent seed is recovered from the cotton lint in India.

Processing of Cotton Seed Cake



Cotton which is harvested contains seed which is separated from cotton by ginning process. Cotton without seed is called as lint. Lint is packed in bale form in hydraulic / pneumatic press and taken to mills for various purposes. Cotton seed is further processed into oil and meal. Oil cake is used as animal feed, while oil used for human consumption. Crushing cotton seed starts as soon as cotton season begins in September – October and continues till June of consecutive year. Crushing of cotton seed ends as soon as monsoon starts. Cotton seed contains 12-14 per cent of oil and 82-85 per cent of cake. Oil is mainly used for edible purpose. Cotton seed oil cake is mainly used for feeding cattle in India. Farmers prefer cotton seed cake compare to other cakes like ground nut cake due to less heat generation. Most of the domestic production is consumed by India alone confined to states of Gujarat, Rajasthan and Maharashtra. Crushing comes to halt during the monsoon months beginning from June to august. Major reason attributing for lower crushing are lower arrivals during this period and absence of demand for the cattle feed during monsoon period. Though crushing is done meal quality would not be good due to absorbing of water contents from atmosphere thus making the meal unfit for cattle feed.

Indian Cotton Seed Balance Sheet over Years

Cotton seed is produced across the major cotton producing countries in the world. Recovery of cotton seed is lesser in cotton growing regions where mostly hybrids are used for production. While in India and Pakistan cotton seed recovery is higher compared to other regions where cotton is produced. Indian cotton seed oilcake prices are not having exposure to the international prices as supply demand is met locally. The detail of the balance sheet is given in the following table:

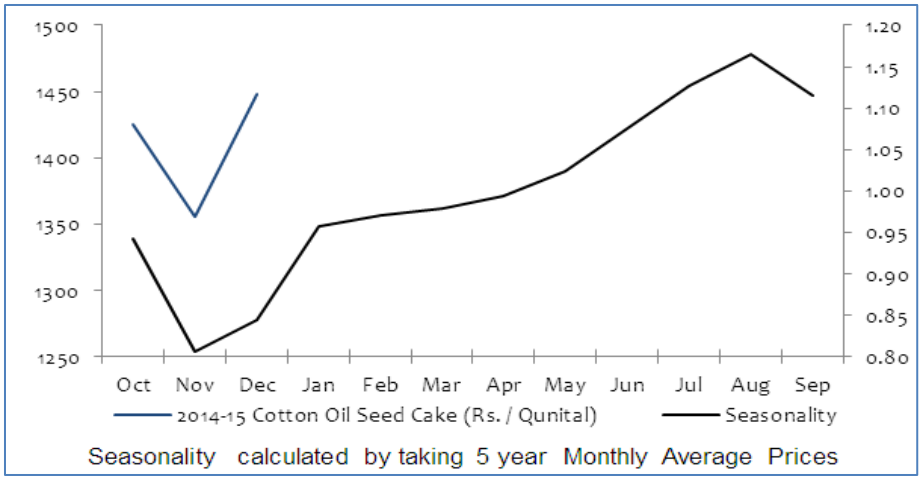
Indian Balance Sheet for Cotton Seed Cake **('000 MT)**

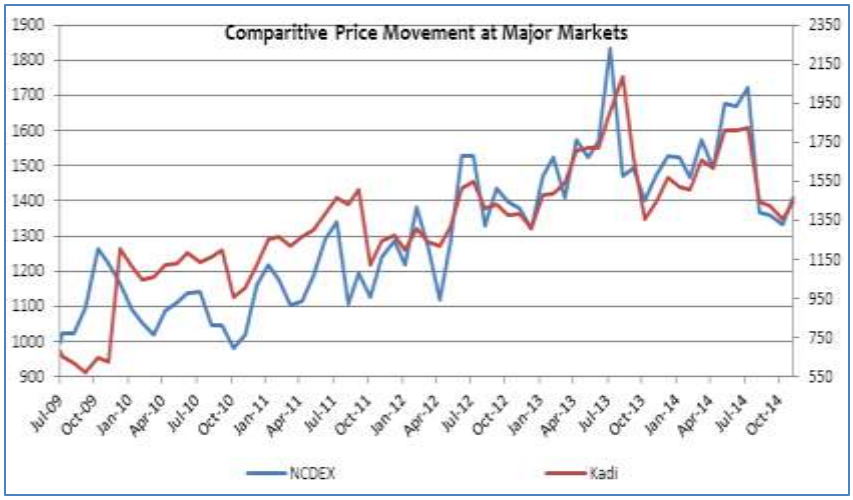
Particulars	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Crush	5,965	6,580	7,415	7,200	7,300	8,000	8,400	8,500	9,100	9,650
Production	2,800	3,090	3,480	3,380	3,429	3,750	3,940	3,990	4,260	4,520
MY Exports	6	6	5	1	4	56	13	33	35	35
Total Dom. Cons.	2,794	3,084	3,475	3,379	3,425	3,694	3,927	3,957	4,225	4,485

Source: Foreign Agricultural Service, Official USDA Estimates

Price Trend Analysis

The adjacent picture depicts the price seasonality and prices of Cotton Seed Cake at Kadi. Looking at the seasonal trend Cotton seed cake prices tend to remain strong during the months between July and September amid the strong crush demand for seed and slackening crop arrivals. Prices fall (times sharply) during November – February period amidst the increase in arrivals of cotton. In 2014-15, the Indian Cotton seed cake prices have followed seasonal trend between November 2013 & February 2014 as the prospects of significant surge in global cotton production leading to slack in demand. The report of abnormal monsoon is currently applying pressure to the prices, but if the price follows the seasonality, another upsurge is the prices could be noticed in the coming months.





The analysis of the price movement in spot (Bareilly) and futures (NCDEX) reveals that the prices tend to peak in the month of November and February primarily due to lower demand for Cotton oil seed cake from the industry. The recent report of the lower cotton seed cake production in India, China, US and Australia is likely to keep in the Indian demand on the higher side which would indirectly support the prices in the coming months.

Price forecast: Technical Outlook (NCDEX)

Explanation:

Marginal divergence is seen in the (Moving Average Convergence - Divergence) MACD curves for the duration of 21 weeks and 50 weeks. The lower 21 week moving average on the monthly price has always remained above the 50 week moving average and is still maintaining the move on the upper side, which is denoting the underlying strength of Cotton oil seed cake prices. The Parabolic SAR refers to a price and time based trading system. SAR stands for "stop and reverse." SAR trails price as the trend extends over time. In the case of cotton seed cake, the SAR has always been in the green region supporting the underlying strength in the prices.

Technical Recommendation:

The market is expected to trade bullishly in the coming months with the top side target of 1800 (End of February 2015) with maximum down side expectation of 1140.

Price Expectation

Commodity	Units	Current Market (15.12.2014)	Market View	Technical Projections		
				Support	T1	T2
Cotton Seed Cake	Rs. / Qtl.	1409	↑	1140	1800	2100

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