

SEASONAL COMMODITY INSIGHT

19th January 2015

Groundnut Meal

Domestic Scenario

Groundnut, or peanut, is commonly called the poor man's nut. Today it is an important oilseed and food crop. This plant is native to South America and has never been found uncultivated. Groundnut is the single largest source of edible oils in India and constitutes roughly about 15 per cent of the total oilseed production. Paralleling area under production, about 90 per cent of the production comes from the five major states in India. These states are Andhra Pradesh, Gujarat, Karnataka, Tamil Nadu and Maharashtra. Andhra Pradesh and Gujarat alone contributes to about 88 per cent of the total production. India's groundnut production fluctuates between 4.5 to 10 million MT a year. Groundnut is grown both in kharif and rabi season. Gujarat accounts for over 34.5 per cent of India's groundnut seed production, followed by Andhra Pradesh (18.38 per cent) and Tamil Nadu (14.16 per cent).

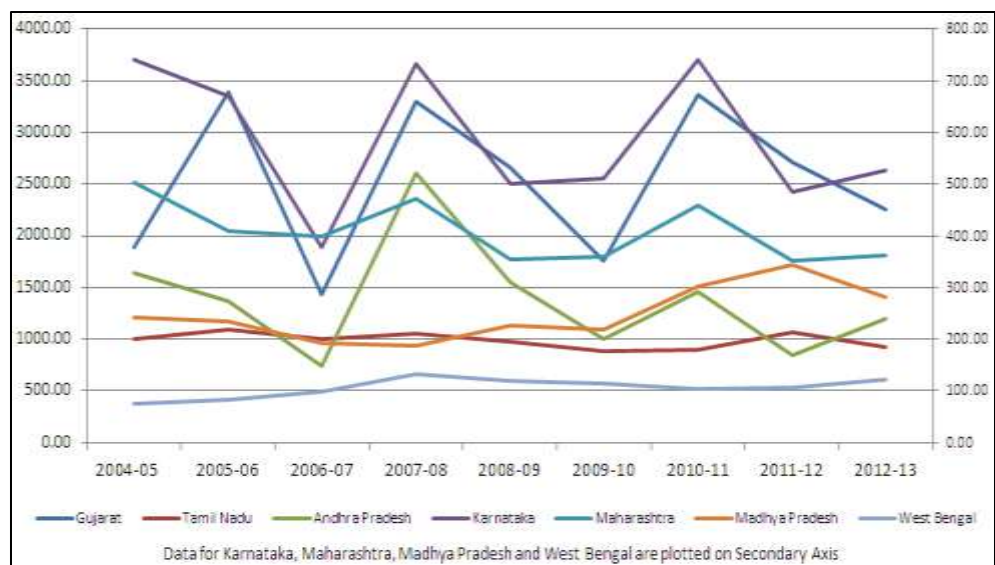
State wise Production of Groundnut in India

('000 MT)

States	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Gujarat	1886.60	3389.00	1435.00	3299.00	2661.00	1757.00	3366.10	2717.00	2251.82
Tamil Nadu	1005.30	1098.20	1006.50	1047.60	974.60	889.77	895.70	1060.65	920.79
Andhra Pradesh	1639.50	1366.00	743.00	2604.00	1554.10	1006.00	1458.00	844.00	1195.42
Karnataka	742.00	671.00	379.00	733.00	501.00	512.00	742.00	485.00	527.00
Maharashtra	502.00	410.00	399.00	472.00	355.00	359.00	460.00	351.00	362.00
Madhya Pradesh	242.70	234.40	193.40	186.80	227.60	217.90	301.60	344.60	280.68
West Bengal	75.50	83.10	98.30	132.70	118.30	113.02	103.17	105.57	122.11
Others	680.80	741.60	609.30	707.40	776.50	573.81	938.21	1055.89	842.79
All India	6774.40	7993.30	4863.50	9182.50	7168.10	5428.49	8264.78	6963.72	6502.61

Source: Directorate of Economics and Statistics, Department of Agriculture and Cooperation & Solvent Extractors' Association of India

The average Indian consumption of groundnut is 5 million MT per year. The Indian variety of groundnut has 45-48 per cent oil content of which 30 per cent can be extracted, while the rest is retained by the cake. Among prominent cultivated crops in the developing countries, groundnut is unique because the plant and its produce have a wide range of uses in the daily life of the people as well as in the various industries. The roots of the plant help to enrich the soil and the vines serve as excellent fodder for cattle. The nuts, in addition to being the most consequential



source of edible oil, are useful in numerous other ways. When the cake is powdered and extracted in solvent, it yields defatted groundnut meal. Thus the crop has gained great popularity, based on its all-around usefulness and the financial returns it brings to the grower. Approximately one-third of world production is used in the confectionery products. Utilization of oil, meal and confectionery groundnuts are all increasing concurrent with a gradual shift away from oil and meal into confectionery use. In many groundnut-producing countries, several products and by-products are processed and consumed locally as a few are exported too. Among the by-products traded in the international market is peanut butter and roasted groundnuts.

International Scenario

From the above table we can see that the global production over the years have shown gradual improvement. It showed an increase of about 6.69 per cent since 2001-02. The domestic consumption has also shown a marginal improvement of 6.21 per cent. But, the imports and exports have dropped significantly by 80.58 per cent and 72.49 per cent respectively. The negative fact about the groundnut meal trade is the level of decline in global trade. There has been a significant increase in the global ending stock over the above period, which is the price limiting factor but I feel that the enhanced demand from China & Europe is going to comfortably absorb the increased ending stock and sustain the prices on the upper levels.

Global Groundnut Meal Balance sheet

(million MT)

Years	Beginning Stocks	Production	Imports	Exports	Tot. Dom. Consumption	Ending Stocks
2001-02	24	6,382	278	269	6,394	21
2002-03	21	5,846	110	97	5,861	19
2003-04	19	6,361	260	286	6,289	65
2004-05	65	6,298	122	148	6,265	72
2005-06	72	6,088	199	235	6,058	66
2006-07	66	5,490	163	203	5,496	20
2007-08	20	5,973	141	169	5,944	21
2008-09	21	6,261	60	91	6,179	72
2009-10	72	5,946	112	127	5,941	62
2010-11	62	6,462	118	149	6,423	70
2011-12	70	6,459	44	65	6,464	44
2012-13	44	6,726	33	78	6,687	38
2013-14	38	6,832	87	76	6,839	42
2014-15	42	6,809	54	74	6,791	40

Source: Foreign Agricultural Service, Official USDA Estimates

Countries like South Africa, India, China and Egypt have good potential to utilize the opportunity to export groundnuts or groundnut products to the developed countries. They can earn valuable foreign exchange to improve their economic conditions. In the international market demand for groundnut products is determined by several factors. The primary factor in Africa has been population growth. In Asia, demand has grown due to a combination of population growth, increase in per capita income and urbanization. Expansion of urban areas signals higher incomes, higher opportunity cost of time and therefore greater demand for convenience foods. Groundnut production and consumption in the period up to 2010 is likely to shift progressively more to developing countries. This boost will be seen in all regions with most rapid growth in Asia. Per capita consumption will grow sharply in Asia, slowly in sub-Saharan Africa and will decline in Latin America.

Country wise global Supply –n – Demand of Groundnut ('000 MT)

Country	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Production (1000 MT)								
China	13027	14286	14708	15644	16046	16692	16972	16500
India	6800	6250	4900	5850	5500	5000	5650	5000
Nigeria	2847	2873	2978	3799	2963	3070	3000	3000
United States	1666	2342	1675	1886	1660	3064	1893	2363
Burma	1088	1202	1305	1362	1399	1372	1400	1400
Indonesia	1150	1250	1250	1250	1165	1145	1160	1150
Argentina	800	860	836	1033	1023	1016	997	1000
Others	6673	8069	8469	8992	8572	8760	8763	8716
World	34051	37132	36121	39816	38328	40119	39835	39129
Total Dom. Cons. (1000 MT)								
China	12328	13600	14101	15112	15495	16203	16437	16200
India	6298	5830	4520	4920	4505	4570	4745	4575
Nigeria	2855	2881	2986	3450	3328	3078	3008	3008
United States	1581	1553	1576	1781	1760	1776	1850	1870
Indonesia	1401	1465	1487	1499	1442	1490	1460	1460
Burma	1073	1197	1290	1330	1393	1430	1420	1415
Sudan	561	713	891	808	1171	1018	835	851
Tanzania	398	331	338	455	641	800	790	790
Vietnam	490	503	531	642	682	710	735	760
European Union	709	689	680	687	674	729	734	736
Senegal	329	738	1005	1059	678	682	620	680
Others	5714	6511	6449	6780	6691	6592	6662	6651
World	33737	36011	35854	38523	38460	39078	39296	38996
Ending Stocks (1000 MT)								
United States	468	966	829	688	455	1257	843	889
Argentina	102	21	10	162	523	713	875	888
Senegal	11	4	29	234	63	28	108	103
India	132	184	108	174	112	20	141	42
Vietnam	29	33	13	8	118	64	49	39
Mali	0	57	37	30	25	29	33	34
Indonesia	24	40	69	103	46	36	38	30
Sudan	0	0	48	0	11	22	34	30
Burma	92	92	102	129	130	67	42	22
Brazil	194	217	166	107	94	22	26	21
Others	203	184	195	686	184	161	123	94
World	1255	1798	1606	2321	1761	2419	2312	2192

Source: Foreign Agricultural Service, Official USDA Estimates

Country wise global Supply –n – Demand of Groundnut Meal

('000 MT)

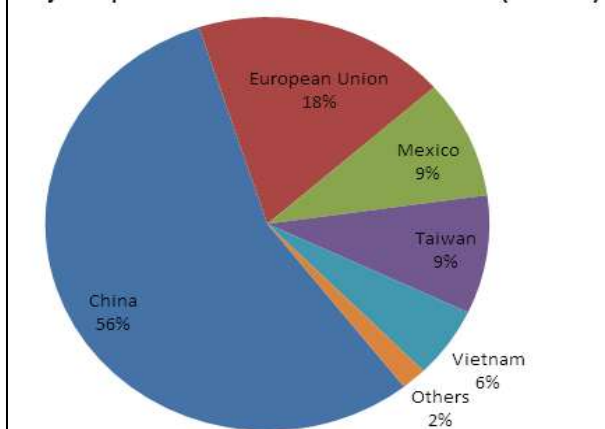
Country	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Production (1000 MT)								
China	2,575	2,770	2,788	3,019	3,224	3,424	3,470	3,465
India	1,973	1,820	1,370	1,525	1,370	1,400	1,445	1,410
Burma	225	248	275	290	300	325	325	325
Nigeria	220	220	228	260	260	240	240	240
Sudan	92	127	180	176	176	176	180	180
Tanzania	88	70	70	108	140	160	160	160
Senegal	57	182	247	258	138	120	120	140
United States	108	95	85	114	114	124	123	127
Argentina	94	120	72	52	78	81	95	100
Others	541	609	631	660	659	676	674	662
World	5,973	6,261	5,946	6,462	6,459	6,726	6,832	6,809
Total Dom. Cons. (1000 MT)								
China	2,674	2,787	2,822	3,047	3,224	3,431	3,529	3,492
India	1,843	1,776	1,324	1,459	1,362	1,385	1,435	1,405
Burma	230	250	277	290	300	320	320	325
Nigeria	220	220	228	260	260	240	240	240
Sudan	76	111	164	160	160	160	164	164
Tanzania	88	70	70	108	140	160	160	160
United States	105	92	83	102	98	111	117	122
Senegal	54	155	214	211	150	118	100	120
Argentina	78	80	72	53	62	65	76	80
Others	576	638	687	733	708	697	698	683
World	5,944	6,179	5,941	6,423	6,464	6,687	6,839	6,791
Ending Stocks (1000 MT)								
Burma	9	7	5	5	5	10	15	15
Senegal	0	20	30	35	22	10	10	10
Argentina	7	39	7	1	1	4	5	5
United States	2	2	3	4	4	4	4	4
Indonesia	3	3	3	4	3	3	3	3
Thailand	0	0	14	11	9	7	5	3
Others	0	1	0	10	0	0	0	0
World	21	72	62	70	44	38	42	40

Source: Foreign Agricultural Service, Official USDA Estimates

Global Trade Scenario for Groundnut Meal

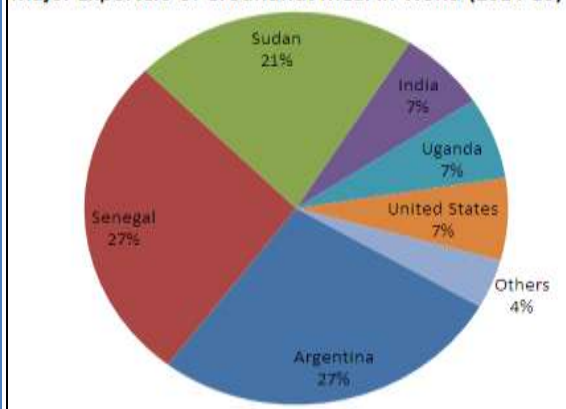
The top two importing nations accounts for 74.07 per cent of the total global imports of which a whopping 55.56 per cent is done only by China. The second most important destination is EU contributing to 18.52 per cent of the total imports. The other countries worth mentioning are Mexico, Taiwan and Vietnam. Thus, going by the share of the quantum of the imports done in the last year, one should be focused enough to track the prices and the sentiments of Groundnut meal trade in China and EU.

Major Importers of Groundnut Meal in World (2014-15)



The major countries involved in the export of groundnut meal are explained by the following chart. As per the details three countries are closely competing for the share in the global exports together totaling 75.68 per cent. The leading spot is shared by Argentina and Senegal with shares of 27.03 per cent each closely followed by Sudan at 21.62 per cent. The other exporting nations worth mentioning are India, Uganda and United States, each with respective share of 6.76 per cent.

Major Exporters of Groundnut Meal in World (2014-15)



Major Importers of Groundnut Meal in World

(‘000 MT)

Country	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
China	101	24	37	32	3	9	60	30
European Union	8	7	39	66	18	6	11	10
Mexico	1	2	0	10	15	6	3	5
Taiwan	5	7	4	5	4	9	9	5
Vietnam	9	11	6	3	3	3	3	3
Others	17	9	26	2	1	0	1	1
World	141	60	112	118	44	33	87	54

Source: Foreign Agricultural Service, Official USDA Estimates

Major Exporters of Groundnut Meal in World

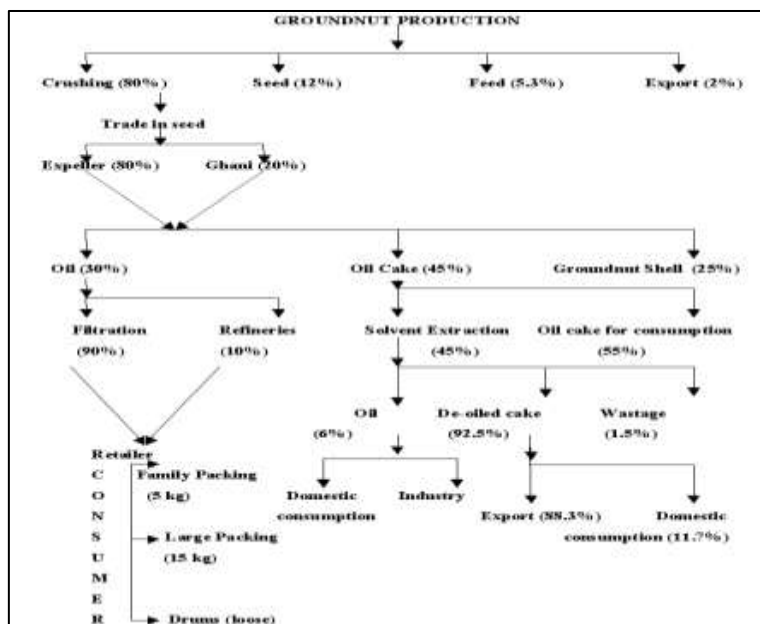
(‘000 MT)

Country	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Argentina	9	8	32	5	16	13	18	20
Senegal	3	8	23	42	1	14	20	20
Sudan	16	16	16	16	16	16	16	16
India	130	44	46	66	8	15	10	5
Uganda	5	5	5	5	5	5	5	5
United States	4	3	1	11	16	13	6	5
Others	2	7	4	4	3	2	1	3
World	169	91	127	149	65	78	76	74

Source: Foreign Agricultural Service, Official USDA Estimates

Features India's Groundnut Meal Industry

For a brief understanding of the groundnut meal, the process of making groundnut meal is shown in the adjacent chart. Over half of the groundnut harvested worldwide is crushed for oil and a substantial quantity of groundnut produced in developing countries is traded in domestic markets. International trade of groundnuts is mainly in the form of in shell (pods), shelled (kernels) and meal (cake). A large trade of confectionery groundnut is also booming in the international market. The international price of groundnuts is generally decided by the crop size and quality in United States of America. The fortunes for the Indian groundnut (shelled) export are bright and it may likely to emerge as a major supplier of raw and processed groundnut mainly because of its large production base.



Maximum possible levels of aflatoxin in imported groundnut for human consumption and livestock and poultry feeds

Country	Aflatoxin type	Maximum permissible level (ng g ⁻¹)	
		Foodstuffs	Livestock feed
Belgium	B ₁	5	20
France	B ₁	1	20
Germany	B ₁	2	20
Ireland	B ₁	5	20
Italy	B ₁	5	20
Netherlands	B ₁	0	20
Sweden	B ₁ , B ₂ , G ₁ , G ₂	5	10
UK	B ₁ , B ₂ , G ₁ , G ₂	4	20
USA	B ₁ , B ₂ , G ₁ , G ₂	20	20

Source: Freeman et al. 1999, ICRISAT

Groundnut oil is thinly traded in international markets, because the major producers like China, India and the United States of America consume substantial amounts in their domestic markets. This national use reduces the quantities available for export. In the 1960s and 1970s groundnut oil was the major item traded as edible groundnut trade was negligible. Since that period, the reverse has occurred. Edible groundnuts dominate world groundnut trade while groundnut oil is of minor importance. The export trade of oil in developing countries is concentrated in Senegal and the Sudan. India has a self-sufficiency policy for vegetable oil, of

which groundnut is a major component. In addition, India has producer subsidies, as do many other countries. Under GATT agreement, these markets would be opened up and costs of production could change. Slightly over half of the groundnut production is crushed into oil for human consumption or industrial uses. Protein meal, a by-product of crushing, is an ingredient in livestock feeds. Groundnut is also consumed directly and is used in processed food and snacks. Approximately one-third of world production is used in the confectionery products. Utilization of oil, meal and confectionery groundnuts are all increasing concurrent with a gradual shift away from oil and meal into confectionery use. In many groundnut-producing countries, several products and by-products

are processed and consumed locally as a few are exported too. Among the by-products traded in the international market are peanut butter and roasted groundnuts.

The world is experiencing a shortage of edible oil and proteins. Groundnut plays a useful role in alleviating these deficiencies as it is a rich source of edible oil and protein. Groundnut has an outer thick woody shell. Inside normally there are 2 or 3 embedded seeds (kernel). The seed consists of 2 cotyledons and the germ covered by an outer thin skin called the testa. The colour of the testa may be red, brown, purple or white depending upon the type and variety. Testa constitutes about 4 to 5 percent of the weight of the kernel. The cotyledons constitute the bulk of the seed in the range of around 92 to 94 percent of the weight. The germ constitutes around 3 to 4 percent of the seed weight. The testa protects the seed against pests and diseases. Cotyledons are the storage organs, which supply food the germ during germination. As a result of these functional differences, the chemical make-up of the parts of the kernel also differ.

Chemical Composition of Groundnut Shell, Haulms and Oil Cake

Constituent	Percentage
Shell	
Cellulose	65.7
Carbohydrates	21.2
Proteins	7.3
Minerals	4.5
Lipids	1.2
Haulms	
Protein	8.30-15.0
Lipid	1.39-2.88
Crude fibre	22.11-35.35
Carbohydrates	38.06-46.95
Minerals	9.0-17.04
Moisture	7.13-10.0
Oil Cake	
Moisture	8-10
Oil	0.7-6
Crude protein	45-60
Carbohydrates	22-30
Mineral matter	4-5.7
Crude fibre	3.8-7.5

Source: Reddy, P.S., 1988

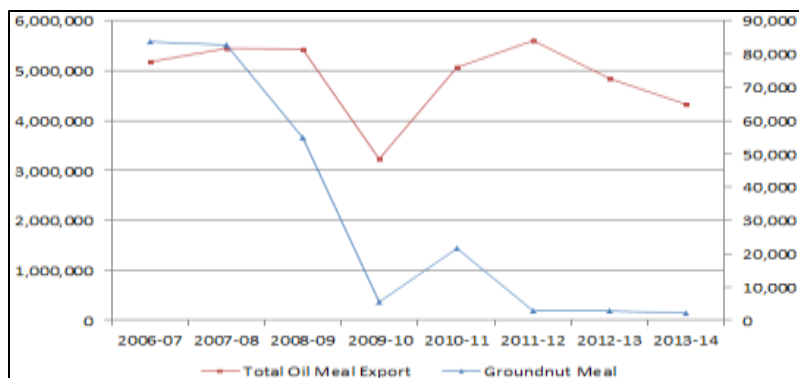
Trends in Export of Groundnut Meal

Year	Groundnut Meal	Total Oil Meal Export	% of total meal Exports
2006-07	83,650	5,170,700	1.62
2007-08	82,725	5,442,132	1.52
2008-09	54,781	5,421,607	1.01
2009-10	5,500	3,224,787	0.17
2010-11	21,480	5,071,779	0.42
2011-12	2,863	5,599,098	0.05
2012-13	2,883	4,846,013	0.06
2013-14	2,167	4,331,450	0.05

Source: Solvent Extractors' Association of India

The quantum and direction of Indian groundnut and its meal exports is dealt in the subsequent sections. As the trend suggest, the importance of meal export is declining year on year which, gives an indication that the meal

trade in groundnut is gradually losing its importance in the global export market. The export of groundnut is also on decline which hints at the localized industrial usage of groundnut in the processing industry. The country wise direction of export of groundnut reveals that Indonesia alone imports 44.51 per cent on the total Indian groundnut. The other countries worth mentioning of the imports are Philippines (11.80 per cent), Malaysia (11.58 per cent), Vietnam (7.91 per cent) and Thailand (4.52 per cent).

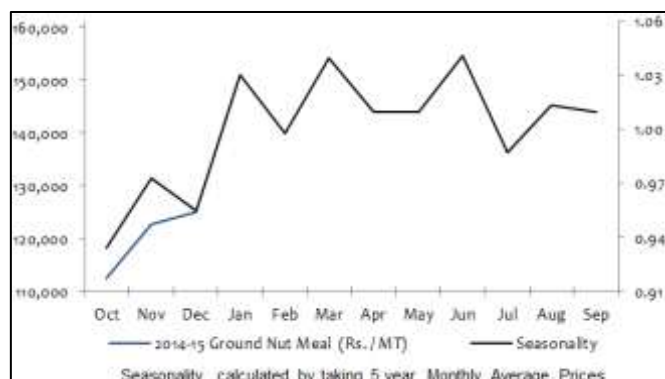
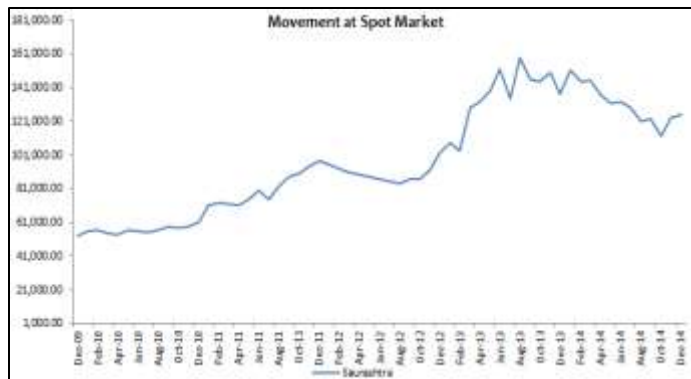


Country wise Export of Groundnut

Country	2011-12	2012-13	2013-14
Indonesia	252665	170179	227755
Philippines	54824	57906	60384
Malaysia	76596	70276	59259
Vietnam	241497	139362	40466
Thailand	32889	22766	23116
Pakistan	14039	10818	13813
Ukraine	14677	11064	12577
Russia	10165	3569	9438
Mexico	33274	1045	2770
China	38340	4721	2687
Others	63657	43929	59397
World	832623	535635	511662

Source: Solvent Extractors' Association of India

Price trend Analysis



As per price seasonality index given in the chart, groundnut meal prices touches peak in March and June months that is lean season. The prices remain mostly stable or weak in February-May period that is peak arrival season for groundnut. However, the price movement are largely influenced by global meal demand and it dynamics in the US meal market. The movement in the current years can be bullish as groundnut crop is expected to be lower than 2013-14. The uptrend is expected to continue for the next three -four months due to low carry forward stocks. Fresh crop harvest has started and peak season is in Feb-April. At present, spot prices are trading around Rs 2400-2600 per Quintal.

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