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World Peanut Market:

An Overview of the Past 30 Years

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Conversion Table

U.S. Abbr.	Unit	Approximate Metric Equivalent
	Length	
mi	mile	1.609 kilometers
yd	yard	0.9144 meters
ft *or* '	foot	30.48 centimeters
in *or* "	inch	2.54 centimeters
	Area	
sq mi *or* mi^2	square mile	2.59 square kilometers
acre	acre	0.405 hectares *or* 4047 square meters
sq ft *or* ft^2	square foot	0.093 square meters
	Volume/Capacity	
gal	gallon	3.785 liters
qt	quart	0.946 liters
pt	pint	0.473 liters
fl oz	fluid ounce	29.573 milliliters or 28.416 cubic centimeters
bu	bushel	35.238 liters
cu ft *or* ft^3	cubic foot	0.028 cubic meters
	Mass/Weight	
ton	ton	0.907 metric ton
lb	pound	0.453 kilogram
oz	ounce	28.349 grams

Metric Abbr.	Unit	Approximate U.S. Equivalent
	Length	
km	kilometer	0.62 mile
m	meter	39.37 inches *or* 1.09 yards
cm	centimeter	0.39 inch
mm	millimeter	0.04 inch
	Area	
ha	hectare	2.47 acres
	Volume/Capacity	
liter	liter	61.02 cubic inches *or* 1.057 quarts
ml	milliliter	0.06 cubic inch *or* 0.034 fluid ounce
cc	cubic centimeter	0.061 cubic inch *or* 0.035 fluid ounce
	Mass/Weight	
MT	metric ton	1.1 tons
kg	kilogram	2.205 pounds
g	gram	0.035 ounce
mg	milligram	3.5×10^{-5} ounce

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Abstract

Despite the increase in its total global production, since the 1970s, peanuts' share in the total production of vegetable oil and meal has decreased following the emergence of soybeans. In addition, an increasing share of the total production of peanuts has been devoted to food purposes. World-harvested area has changed very little since the 1970s; however, there have been regional and sub-regional shifts. Asia, and especially the People's Republic of China, has significantly increased its share, while Africa's share has decreased, affected by the decline of the peanut oil and meal markets. America also has seen a decrease in its share in the world peanut production. On the other hand, since the early 1990s, China, the United States, and Argentina have led the exports of edible peanuts (i.e., peanuts not used for crushing for oil and meal production). The European Union and Asia have remained as the major world importers of peanuts. In addition, while concentration of the export market seems to have increased (when considering the six major exporters), import markets appear more fragmented. Finally, world real peanut prices have continued their decreasing trend since 1995 showing lower variability.

Keyword: Peanuts, Production, Utilization, Exports, Imports, Prices.

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Table of Contents

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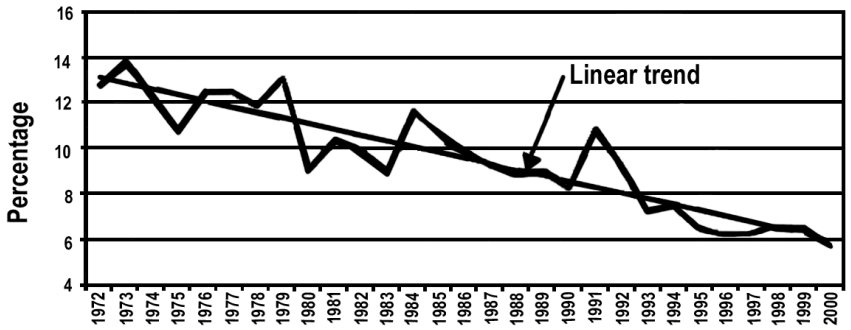
Peanuts are one of the principal oilseeds in the world. According to USDA estimates for the crop year 1999/2000 (FAS, 2000), from a world total oilseeds production of 286.7 million metric tons, peanuts' share was approximately 10 percent, behind soybeans (53 percent), rapeseed (15 percent), and cottonseed (12 percent). Until the mid-1980s, peanuts ranked third in terms of production among oilseeds; however, changes in consumer preferences in industrial countries due to growing health concerns fostered the production of rapeseed and sunflower seed. Peanut production can be found on all the continents, although four of them (*i.e.*, excluding Europe) account for the majority of production (99 percent). Furthermore, according to USDA data (ERS, 2001), on average for the 1972-2000 period, 90 percent of the world production was accounted by developing countries. As shown in figure 1, developed countries' share in total world production of peanuts has steadily decreased from approximately 12 percent during the 1970s to about 6 percent during the 1990s.

In terms of consumption, while peanuts have been steadily substituted by soybeans for oil and meal purposes, their utilization for food purposes has been increasing. In addition, since the early 1990s international trade of peanuts has gone through a number of changes. China, the United States, and Argentina are the major peanut exporting countries, although their share in world total exports has been decreasing. It should be noted that if we account for the six major exporters, their share has increased since the 1970s. An opposite view is offered on the import side. Thus, while EU and Asian countries are still the main importers, the trend observed on the import share by country is decreasing (*i.e.*, toward a more fragmented market). Finally, international prices of peanuts in real terms have continued their declining trend, showing also since 1995 a lower volatility.

The purpose of the publication is to provide an overview of the world peanut market based on information for the last three decades, updating the Carley and Fletcher (1995) report, which reviews the situation based on information up to 1991. Therefore, the emphasis will be on the events of the past decade. The data source for this study is the Production, Supply, and Distribution database from the Economic Research Service (ERS, 2001), which provides time series data for peanut production and consumption from 1972 to 2000. The information about international prices was compiled from *The Public Ledger*. In addition, in order to capture the major trends, we have divided the series by five-year averages: 1972-75, 1976-80, 1981-85, 1986- 90, 1991-95, and 1996-2000. Further-

Figure 1. Proportion of Peanuts Produced in Developed Countries



Source: USDA

more, the analysis is conducted at three levels: global (*i.e.*, world), regional and by major countries.

World Peanut Production, Harvested Area and Yields

The world average in-shell peanut production averaged 29,108 thousand metric tons during the 1996-2000 period, growing between 1972 to 2000 at an annual rate of 2.5 percent. The production increase was due both to an increase in the harvested area and in peanut yields. However, the latter played a more fundamental role in the production growth. During the period 1972-2000 yields steadily grew from 0.8 to 1.37 metric tons per hectare (*i.e.*, 1.9 percent increase per year). During the same period, the area harvested remained approximately stable, with an annual growth of 0.1 percent, averaging 18.9 million hectares, and with a coefficient of variation of 7 percent. Furthermore, most of the growth in harvested area occurred during the 1990s. In fact, the annual growth rate during the period 1972 to 1990 was only 0.1 percent, while between 1991 and 2000 the annual growth rate was 1.2 percent.

As seen in table 2 (page 8), in order to capture the main trends, following Fletcher *et al.,* (1992), the world peanut market is aggregated into four geographic regions (considering only the major countries in each region, which constitute above the 80 percent of the production in each continent): America, Africa, Asia and the Rest of the World. America, Africa, and Asia were further divided into sub-regions. Thus, America was divided into North America and South America. Africa was divided into three regions: Eastern Africa, Southern Africa and Western Africa. Asia was divided into Eastern Asia, Southeast Asia and Southwest Asia. In addition, to give a better view of the market, we analyzed the behavior of major producers, consumers, and exporter and importer countries.

Production by Regions and Major Countries

While the aggregate world production of peanuts has increased, there has been significant regional variation (see tables 3 and 4, pages 9-10). Most of the world growth in production occurred in Asia. Comparing the average production for the 1996-2000 period with that for the 1972-75 period, Asian production grew by 127.3 percent, followed by the production in Africa, which grew by 18.6 percent, and by North America with a growth of 7.31 percent.

It is important to note that the variation observed among regions is also present when we consider the productive behavior of sub-regions. Thus, Asia's impressive growth in production was mostly located in the Eastern Asia sub-region, which grew by 382.7 percent when comparing the average production for 1996-2000 with the average for the 1972-75 period. As shown in table 4, most of this growth is explained by the dramatic increase in the Chinese production (420 percent for the same period), which reached an average production of 11.5 million metric tons during the 1996-2000 period. This important boost in the Chinese production, which took place during the 1990s, made China rank first among world peanut producers, with a share of 39.4 percent (computed based on the average production for the 1996-2000 period). This may reflect the reform in the Chinese agricultural sector (see Lin, 1992).

The other Asian sub-regions also presented substantive growth in their peanut production, though less impressive than the one observed in Eastern Asia. Southeast Asia grew by 65.6 percent and Southwest Asia by 30.9 percent, when comparing the average production for 1996-2000 with the average for 1972-75.

Africa's production growth is mainly explained by the 52.6 percent growth in West Africa production for the 1996-2000 period with respect to 1972-75. During the same period, the other two regions (Eastern and Southern Africa) showed decreases in their production. Eastern Africa decreased by 40.3 percent and Southern Africa by 25.9 percent. This regional pattern seems to indicate that production of peanuts in Africa is becoming concentrated in the Western Africa sub-region, which has steadily increased its share in total African production from 60.7 percent for the 1972-75 period to 78.1 percent during the 1996-2000 period. Within this region and for the same period (see table 4, page 10), significant increases of production were also observed in Chad (516.8 percent) and Nigeria (122.9 percent). Nigeria's growth is especially important, since it represented approximately 30 percent of the Western Africa production during the period 1996-2000.

The production growth observed for the American region when comparing the average production for 1996-2000 with the one for the 1972-75 period, is also mixed. Production in the sub-region of North America grew by 7.31 percent, while production in the South America region decreased by 28.4 percent. The de-

Table 1. World peanut production, area harvested, and yields, 1972-2000, and 5-year averages.

Year	Area Harvested Thou. Ha.	Yield Mt/Ha.	Production Thou. Mt.
1972	18,121	0.80	14,421
1973	17,914	0.91	16,251
1974	17,887	0.93	16,651
1975	18,662	0.99	18,468
1976	18,062	0.91	16,378
1977	17,782	0.94	16,735
1978	17,833	0.99	17,711
1979	17,737	0.97	17,183
1980	17,508	0.92	16,040
1981	18,272	1.07	19,581
1982	17,705	0.97	17,205
1983	17,543	1.05	18,510
1984	17,405	1.12	19,449
1985	17,612	1.12	19,784
1986	18,138	1.11	20,159
1987	17,989	1.15	20,656
1988	19,628	1.15	22,657
1989	19,418	1.12	21,670
1990	19,089	1.13	21,656
1991	19,544	1.12	21,879
1992	19,180	1.20	22,993
1993	19,843	1.22	24,229
1994	20,780	1.32	27,366
1995	20,951	1.31	27,467
1996	20,872	1.39	28,958
1997	20,182	1.35	27,289
1998	21,225	1.40	29,819
1999	21,622	1.35	29,263
2000	22,038	1.37	30,210
Averages			
1972-75	18,146	0.91	16,448
1976-80	17,784	0.95	16,809
1981-85	17,707	1.07	18,906
1986-90	18,852	1.13	21,360
1991-95	20,060	1.23	24,787
1996-00	21,188	1.37	29,108

Source: Based on USDA data, PS&D database.

Table 2. Peanut geographic classification, by region and by country

America		Africa		
N. America	**S. America**	**E. Africa**	**S. Africa**	**W. Africa**
Canada	Argentina	Sudan	Malawi	Benin
Mexico	Brazil	Tanzania	Mozambique	Burkina
United States	Nicaragua	Uganda	Republic of S. Africa	Cameroon
			Zambia	Central African Republic
			Zimbabwe	Chad
				Cote d'Ivoire
				Gambia
				Ghana
				Guinea
				Mali
				Niger
				Nigeria
				Senegal
				Togo
				Zaire

Asia		
E. Asia	**S.E. Asia**	**S.W. Asia**
China	Bangladesh	India
Hong Kong	Myanmar	Pakistan
Japan	Indonesia	
South Korea	Malaysia	
Taiwan	Philippines	
	Singapore	
	Thailand	
	Vietnam	

Rest of the World

Near East & Med.	Oceania		Europe	
Egypt	Australia	**East. Europe**[1]	**EU**	**W. Europe**
Morocco		USSR	Belgium-Luxembourg	Switzerland
Turkey		Czechoslovakia	France	
			Germany	
			Italy	
			Netherlands	
			Portugal	
			Spain	
			United Kingdom	
			Austria	
			Norway	
			Sweden	

[1] Corresponds to the former boundaries of those two countries.

Table 3. Annual average world peanut production, 1972-2000 (Thou. Mt.)

Region	1972-75	1976-80	1981-85	1986-90	1991-95	1996-00	Change 1972-75 vs. 1996-00 (%)
America							
N. America	1,664	1,665	1,807	1,809	1,944	1,786	7.31
S. America	867	842	577	504	446	621	-28.35
Subtotal	2,531	2,507	2,384	2,313	2,390	2,407	-4.91
Africa							
E. Africa	998	1,003	620	567	569	595	-40.42
S. Africa	799	690	370	395	365	592	-25.88
W. Africa	2,776	2,579	2,538	2,750	3,085	4,236	52.63
Subtotal	4,573	4,273	3,528	3,711	4,019	5,423	18.60
Asia							
E. Asia	2,399	2,703	4,794	6,017	8,244	11,581	382.69
S.E. Asia	1,295	1,448	1,730	1,781	1,914	2,144	65.62
S.W. Asia	5,528	5,724	6,305	7,344	7,964	7,239	30.95
Subtotal	9,222	9,875	12,828	15,142	18,123	20,964	127.33
Rest of World	123	155	166	193	255	314	156.13
World Total	16,448	16,809	18,906	21,360	24,787	29,108	76.97

Source: Based on USDA data, PS&D database.

Table 4. Percentage distribution of annual peanut production in the 10 major world producer countries, 1972-2000

Country	Production		Share in world production (%)					
	1996-00 (Avg. thou. Mt.)	Change since 1972-75 (%)	1972-75	1976-80	1981-85	1986-90	1991-95	1996-00
China	11,463	420.0	13.4	15.1	24.5	27.4	32.7	39.4
India	7,131	30.3	33.3	33.7	32.9	34.0	31.8	24.5
United States	1,655	2.3	9.8	9.5	9.2	8.0	7.4	5.7
Nigeria	1,310	122.9	3.6	2.7	2.4	1.7	2.0	4.5
Indonesia	979	78.3	3.3	4.4	4.0	3.9	3.9	3.4
Senegal	676	-25.8	5.5	4.7	3.9	3.7	2.8	2.3
Myanmar	563	35.9	2.5	2.4	3.0	2.3	1.7	1.9
Zaire	442	60.0	1.7	1.9	1.9	1.8	1.9	1.5
Argentina	412	12.2	2.2	2.6	1.6	1.6	1.1	1.4
Chad	393	516.8	0.4	0.4	0.4	0.5	0.9	1.4
Rest of the World	4,084	2.5	24.2	22.6	15.9	15.1	13.8	14.0
			World average production (Thou. Mt.)					
World production	29,108	77.0	16,448	16,809	18,906	21,360	24,787	29,108

Source: Based on USDA data, PS&D database.

crease in the South American production is mainly explained by the decline in the Brazilian peanut production by approximately 68 percent.

Area Harvested by Regions and Major Countries

The distribution of area harvested of peanuts closely resembles the distribution observed for the peanut production (see table 5, page 11). Asia was the region with the greatest increase in harvested area, led within the region by Eastern Asia. Comparing the average harvested in the 1996-2000 period with that of the 1972-75 period, Eastern Asia's harvested area grew 108.4 percent, most of which is explained by China. As shown in table 6 (page 11), during this period China multiplied by four its harvested area, which represented on average for the 1996-2000 period 19 percent of the world harvested area and about half of India's harvested area, the country with the greatest harvested area in the world (37 percent).

Comparing the average for the 1996-2000 period with the one for 1972-75, both Africa and America showed a decrease in their harvested areas but with regional variation. In Africa, the Eastern Africa and Southern Africa sub-regions both reduced harvested area by approximately 20 percent while Western Africa's increased 16.9 percent. In the case of America, the decrease in total harvested area is explained by the contraction in South America's harvested area, where it was reduced to almost half its historical size. This reduction is mainly explained by the contraction of the Brazilian peanut sector. On the other hand, North America's harvested area remained approximately constant.

Yield by Regions and Major Countries

As shown in table 7 (page 12), the three regions America, Asia, and Africa have presented steady increases in yields since the 1970s. On aggregate when comparing the average for the 1996-2000 period with the average for 1972-75, Asia showed the greatest growth in yields (74.9 percent), followed by America (24.9 percent), and by Africa (15.2 percent).

In Asia, excepting the case of Southwest Asia, the increase in production was accompanied by a substan-

Table 5. Annual average area harvested of peanut by region, 1972-2000 (Thousand Metric Tons)

Region	1972-75	1976-80	1981-85	1986-90	1991-95	1996-00	Change since 1972-72 (%)
America							
N. America	641	644	621	738	766	659	2.91
S. America	744	597	339	291	254	394	-46.97
Subtotal	1,385	1,241	960	1,030	1,020	1,054	-23.89
Africa							
E. Africa	1,085	1,170	956	789	801	864	-20.35
S. Africa	1,136	997	773	680	635	860	-24.23
W. Africa	4,014	3,758	3,444	3,660	4,178	4,692	16.92
Subtotal	6,234	5,925	5,173	5,128	5,614	6,417	2.93
Asia							
E. Asia	1,960	2,043	2,656	3,101	3,427	4,083	108.36
S.E. Asia	1,379	1,337	1,461	1,548	1,575	1,561	13.17
S.W. Asia	7,113	7,140	7,357	7,947	8,312	7,943	11.67
Subtotal	10,452	10,521	11,475	12,596	13,314	13,587	30.00
Rest of the World	76	97	100	98	112	130	71.88
World total	18,146	17,784	17,707	18,852	20,060	21,188	16.76

Source: Based on USDA data, PS&D database.

Table 6. Percentage distribution of annual hectares of peanuts harvested in the 10 world major producer countries, 1972-2000

Country	Production		Share in world production (%)					
	1996-00 (Avg.thou.Mt.)	Change since 1972-75 (%)	1972-75	1976-80	1981-85	1986-90	1991-95	1996-00
China	4,029	420.0	10.1	10.9	14.5	16.0	16.8	19.0
India	7,842	30.3	39.0	39.9	41.2	41.8	41.0	37.0
United States	569	2.3	3.3	3.4	3.3	3.5	3.4	2.7
Nigeria	1,180	122.9	5.9	4.0	3.1	3.6	3.8	5.6
Indonesia	646	78.3	2.3	2.8	2.8	3.1	3.3	3.0
Senegal	688	-25.8	6.1	6.4	5.2	4.5	4.4	3.2
Myanmar	484	35.9	3.7	3.1	3.4	2.9	2.5	2.3
Zaire	576	60.0	2.5	2.6	2.9	2.8	3.0	2.7
Argentina	286	12.2	1.9	1.9	0.8	1.0	0.8	1.3
Chad	391	516.8	0.4	0.6	0.6	0.7	1.4	1.8
Rest of the World	4,497	2.5	24.7	24.4	22.2	20.2	19.7	21.2
			World average production (Thou. Mt.)					
World harvested area	21,188	77.0	18,146	17,784	17,707	18,852	20,060	21,188

Source: Based on USDA data, PS&D database.

Table 7. Five-year average peanut yield by regions, 1972-2000 (Mt./Ha.)

Region	1972-75	1976-80	1981-85	1986-90	1991-95	1996-00	Change since 1972-72 (%)
America							
N. America	2.60	2.59	2.91	2.45	2.54	2.71	4.27
S. America	1.17	1.14	1.70	1.73	1.76	1.58	35.11
Subtotal	1.83	2.02	2.48	2.25	2.34	2.28	24.93
Africa							
E. Africa	0.92	0.86	0.65	0.72	0.71	0.69	-25.20
S. Africa	0.70	0.69	0.48	0.58	0.57	0.69	-2.18
W. Africa	0.69	0.69	0.74	0.75	0.74	0.90	30.55
Subtotal	0.73	0.72	0.68	0.72	0.72	0.85	15.22
Asia							
E. Asia	1.22	1.32	1.80	1.94	2.41	2.84	131.66
S.E. Asia	0.94	1.08	1.18	1.15	1.22	1.37	46.35
S.W. Asia	0.78	0.80	0.86	0.92	0.96	0.91	17.26
Subtotal	0.88	0.94	1.12	1.20	1.36	1.54	74.88
Rest of the World	1.62	1.60	1.66	1.96	2.28	2.41	49.02
World total	0.91	0.95	1.07	1.13	1.24	1.37	51.56

Source: Based on USDA data, PS&D database.

tive increase in yields. The Eastern Asia region presented the most dramatic increase in yields, starting from 1.22 metric tons per hectare for the 1972-75 period, which was approximately half of North America's yields (the region with the highest yield in the world), to reach a yield of 2.84 metric tons per hectare during the period 1996-2000, 5 percent above North America's yield. This growth is explained by China's peanut yields, which have increased at an average annual rate of 3.3 percent since 1972. In the case of Southwest Asia, most of the increase in production is explained by the increase in the number of hectares, since the yields remained approximately stable during the period. This is especially evident when looking at India's peanut production (see table 8, page 14), where yields have grown since 1972 at an average annual rate of 0.1 percent.

A closer look to the America region shows an increase in yields in the South America region, although their yields are still below the North America yields. However, observing the 5-year averages (see table 7), both yields in North and South America present a decline at the end of the period. In the case of North America, the peak in yields occurred during the 1981-85 period, reaching 2.91 metric tons per hectare, while South America's peak occurred during the period 1991-95 with average yields of 1.76 metric tons per hectare.

Yields in Africa remained approximately stable, slightly increasing in West Africa during the late 1990s. African peanut yields remained below America and Asian yields (African yields are approximately half of the Asian average yields and one third of American yields). However, it is important to note that Nigeria's yield, the main producer from West Africa, showed an increasing trend in yields.

World Peanut Utilization

On average during the 1996-2000 period, world total utilization of peanuts reached 29 million metric tons,

Table 8. Five-year average yield in the major producer countries, 1972-2000 (Mt./Ha.)

Country	Periods						Change 1972-75 vs. 1996-00 (%)
	1972-75	1976-80	1981-85	1986-90	1991-95	1996-00	
China	1.20	1.29	1.79	1.94	2.38	2.84	136.24
India	0.77	0.80	0.85	0.92	0.96	0.91	18.33
United States	2.68	2.64	3.02	2.60	2.67	2.91	8.39
Nigeria	0.55	0.65	0.84	0.54	0.61	1.11	102.88
Indonesia	1.29	1.48	1.53	1.43	1.48	1.52	17.85
Senegal	0.80	0.68	0.80	0.94	0.80	1.02	26.56
Myanmar	0.62	0.73	0.96	0.90	0.87	1.16	86.50
Zaire	0.62	0.68	0.71	0.72	0.75	0.77	23.97
Argentina	1.06	1.33	2.08	1.75	1.72	1.47	38.25
Chad	0.82	0.69	0.69	0.84	0.80	0.98	20.13
Rest of the World	0.76	0.79	0.75	0.81	0.82	0.85	11.29
World	0.91	0.95	1.07	1.13	1.23	1.37	51.61

Source: Based on USDA data, PS&D database.

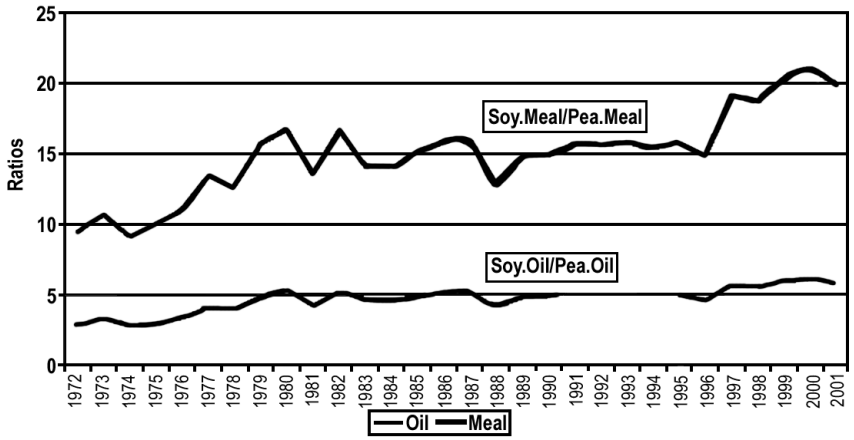
increasing by 77.4 percent with respect to the average during the period 1972-75 (see table 9, page 15). Even if crushing for oil and meal remains as the most important use for peanuts, with an average share of 49.2 percent during the 1996-2000 period, the share of peanuts used for food products (*i.e.*, different than oil) has steadily increased over time. Thus, on average during the 1972-80 period the share of peanuts used for food products was 31.3 percent while during the 1996-2000 period, the share reached 41.1 percent.

Figure 2 presents the ratio of the world production of soybean oil to peanut oil, and a similar ratio for meal. Both ratios present an increasing trend, reflecting the emergence of soybeans as the main oilseed for the production of oil and meal. Also, this trend is clear in the case of meal.

Utilization by Regions

Trends in utilization were variable among regions (see tables 9 and 10, pages 15-16). Within the America region, North America kept increasing its total use of peanuts while South America has reduced usage by about 60 percent during the past 30 years. The North America increase in peanut utilization is due to a steady rise in the use of peanuts for food purposes (excluding

Figure 2: Soybean Oil and Meal to Peanut Oil and Meal Ratios



oil), which grew by 40 percent when we compare the average for the 1996-2000 period with the average for 1972-75. On the other hand, although South America's utilization of peanuts for food also increased, this did not compensate for the contraction in the production of oil and meal, which on average in 1996-2000 was one third of that during the 1972-75 period.

In Africa, utilization decreased both in the Eastern and Southern Africa regions, while Western Africa almost duplicated its utilization during the last 30 years. The decrease in the utilization in the first two regions was due to a contraction in both the food and crushing industries. In Western Africa, the increase in utilization was due to a substantive and steady increase in the use of peanuts for food purposes (209 percent when comparing the average for 1996-2000 with the average for 1972-75).

All the Asian regions presented an increase in their peanut utilization, but there are differences among them. Eastern Asia increased its utilization of peanuts for both food and crushing purposes. On the other hand, while in the Southeast region the increase in utilization was due to a rise of the usage of peanuts for food purposes, in the Southwest region it was due to the increase in crushing purposes.

The Western Europe region, one of the main importers of peanuts, decreased its utilization of peanuts. This is mainly explained by an important contraction in the crushing industry. Meanwhile their utilization for food purposes increased slightly at an annual average rate of about one percent.

Utilization by Major Countries

China, India and the United States process about two-thirds of the total utilization of peanuts in the world (approximately 66 percent, using the average for the 1996-2000 period). However, utilization among the three countries substantially differs. For the period 1996-2000, as shown in table 11 (page 17), of the total amount of peanuts used for crushing and food purposes, China devoted approximately 40 percent to food and 60 percent to crushing. India's share of crushing was around 92 percent, while the United States increased its share for food over time, reaching 77 percent on average during the 1996-2000 period.

The observed patterns for the other countries in table 11 are similar to those observed in the three major producers. Thus, African countries, excepting Sudan, present a higher proportion for food than for crushing, such as in the United States. On the other hand, Myanmar, Burkina Faso, and Argentina present a similar pattern to India, devoting a high proportion of their production to crushing purposes. The remaining countries balance their utilization between food and crushing, such as in China.

World Trade in Peanuts

The world trade market for peanuts may be considered a residual market, in the sense that only a small proportion of the world production is devoted to exports and imports, and most of the production is domestically utilized. Thus, the average share of world peanut production exported since the 1970s has been about 5 percent. Despite its approximately constant share, the total volume of exports has been growing since the late 1980s, although at modest rates, increasing from an average for the 1976-80 period of 1.1 million metric tons to 1.5 million metric tons during 1996-2000 (see table 12, page 18).

Although with some variability, since the late 1980s, the three major exporters (Argentina, China and the United States) have comprised about 60 percent of the total world trade. However, since the 1981-85 period, when the export share of the three major exporters peaked at 65 percent, there has been a slightly downward trend. On the other hand, if we consider the six major exporters, the trend observed is an increasing one. Thus, while on average during the 1972-75 period, they represented 70.8 of the total exports, during the 1996-2000 period this share reached 85 percent. In addition, it is important to note that while the composition of the main six exporters has changed over time, since the early 1990s (besides the three major exporters) India, Netherlands (a re-exporter), and Vietnam have been part of this group. It should also be noted that while during the 1970s African countries were among the major exporters, as the peanut trade shifted from a crush for oil to a market of peanuts for food purposes, their presence in the export market tended to decline in absolute and relative terms. In addition, their position was affected by the presence of aflatoxin in their production, which impeded them in competing in the edible peanut market and by the substitution of peanut oil by other oilseed oils namely soybean oil (see Carley *et al.*, 1995).

Table 9. Five-year average peanut utilization by regions, 1972-2000

Region	Sub-region/Category	1972-75	1976-80	1981-85	1986-90	1991-95	1996-00
America	N. America (thou. mt.)	1,404	1,434	1,504	1,588	1,702	1,726
	Food	915	891	986	1,157	1,166	1,281
	Crushed	410	287	250	291	432	274
	Other[1]	80	255	269	140	112	172
	S. America (thou. mt.)	775	752	441	397	310	416
	Food	92	65	61	113	133	164
	Crushed	615	624	335	229	142	219
	Other[1]	68	63	45	56	35	33
Africa	E. Africa (thou. mt.)	791	884	564	531	548	583
	Food	324	305	243	261	259	287
	Crushed	319	504	285	238	255	268
	Other[1]	149	76	36	32	34	28
	S. Africa (thou. mt.)	715	600	370	346	349	529
	Food	363	293	206	215	225	376
	Crushed	271	204	113	112	89	92
	Other[1]	81	103	50	19	35	62
	W. Africa (thou. mt.)	2,520	2,498	2,498	2,722	3,050	4,215
	Food	753	899	1,081	1,210	1,555	2,329
	Crushed	1,544	1,333	1,079	1,226	1,138	1,371
	Other[1]	224	267	338	285	356	514
Asia	E. Asia (thou. mt.)	2,444	2,718	4,702	5,810	8,032	11,335
	Food	1,041	1,151	1,925	2,287	3,056	4,548
	Crushed	1,109	1,239	2,363	3,040	4,362	5,976
	Other[1]	294	329	413	483	614	811
	S.E. Asia (thou. mt.)	1,305	1,439	1,765	1,872	2,071	2,283
	Food	688	819	963	1,180	1,457	1,567
	Crushed	496	471	628	506	425	518
	Other[1]	121	149	174	186	189	199
	S.W. Asia (thou. mt.)	5,397	5,723	6,285	7,304	7,912	7,146
	Food	474	421	472	541	609	613
	Crushed	4,275	4,559	4,996	5,811	6,268	5,556
	Other[1]	649	743	817	952	1,036	977
Europe	Western Europe (thou. mt.)	901	642	529	560	474	470
	Food	325	342	395	493	448	448
	Crushed	572	295	126	62	21	18
	Other[1]	4	5	8	4	5	4
	Eastern Europe (thou. mt.)	38	55	76	66	29	45
	Food	38	50	69	58	26	45
	Crushed	0	5	8	8	3	0
	Other[1]	0	0	0	0	0	0
Rest of the World (thou. mt.)		96	123	148	182	252	315
	Food	67	95	119	154	229	297
	Crushed	22	21	22	25	20	15
	Other[1]	7	7	7	3	3	4
World (thou. mt.)		16,385	16,869	18,883	21,377	24,729	29,063
	Food	5,077	5,332	6,520	7,667	9,163	11,954
	Crushed	9,632	9,540	10,206	11,548	13,147	14,305
	Other[1]	1,676	1,996	2,157	2,162	2,419	2,804

Source: Based on USDA data, PS&D database. Notes: [1]Includes feed, seed and waste.

Table 10. Five-year average peanut utilization (thou. mt.) and its percentage distribution by use and by regions, 1972-2000

Region	Sub-region/Category	1972-75	1976-80	1981-85	1986-90	1991-95	1996-00
America	N. America (thou. mt.)	1,404	1,434	1,504	1,588	1,702	1,726
	Food	65.1	62.2	65.5	72.8	68.5	74.2
	Crushed	29.2	20.0	16.6	18.3	24.9	15.9
	Other[1]	5.7	17.8	17.9	8.8	6.6	9.9
	S. America (thou. mt.)	775	752	441	397	310	416
	Food	11.8	8.7	13.9	28.4	42.9	39.5
	Crushed	79.3	83.0	75.9	57.6	45.8	52.6
	Other[1]	8.8	8.4	10.2	14.0	11.3	7.9
Africa	E. Africa (thou. mt.)	791	884	564	531	548	583
	Food	40.9	34.5	43.1	49.2	47.3	49.2
	Crushed	40.3	56.9	50.5	44.8	46.5	45.9
	Other[1]	18.8	8.5	6.4	6.0	6.2	4.9
	S. Africa (thou. mt.)	715	600	370	346	349	529
	Food	50.7	48.9	55.7	62.1	64.5	71.0
	Crushed	37.9	34.0	30.7	32.5	25.5	17.3
	Other[1]	11.3	17.1	13.6	5.4	9.9	11.6
	W. Africa (thou. mt.)	2,520	2,498	2,498	2,722	3,050	4,215
	Food	29.9	36.0	43.3	44.5	51.0	55.3
	Crushed	61.3	53.4	43.2	45.1	37.3	32.5
	Other[1]	8.9	10.7	13.5	10.5	11.7	12.2
Asia	E. Asia (thou. mt.)	2,444	2,718	4,702	5,810	8,032	11,335
	Food	42.6	42.3	40.9	39.4	38.0	40.1
	Crushed	45.4	45.6	50.3	52.3	54.3	52.7
	Other[1]	12.0	12.1	8.8	8.3	7.6	7.2
	S.E. Asia (thou. mt.)	1,305	1,439	1,765	1,872	2,071	2,283
	Food	52.7	56.9	54.6	63.0	70.4	68.6
	Crushed	38.0	32.7	35.6	27.0	20.5	22.7
	Other[1]	9.3	10.4	9.9	9.9	9.1	8.7
	S.W. Asia (thou. mt.)	5,397	5,723	6,285	7,304	7,912	7,146
	Food	8.8	7.4	7.5	7.4	7.7	8.6
	Crushed	79.2	79.7	79.5	79.6	79.2	77.8
	Other[1]	12.0	13.0	13.0	13.0	13.1	13.7
Europe	Western Europe (thou. mt.)	901	642	529	560	474	470
	Food	36.1	53.3	74.6	88.2	94.5	95.3
	Crushed	63.5	45.9	23.9	11.0	4.4	3.9
	Other[1]	0.4	0.7	1.6	0.8	1.1	0.9
	Eastern Europe (thou. mt.)	38	55	76	66	29	45
	Food	100.0	91.6	90.0	87.9	89.0	100.0
	Crushed	0.0	8.4	10.0	12.1	11.0	0.0
	Other[1]	0.0	0.0	0.0	0.0	0.0	0.0
Rest of the World (thou. mt.)		96	123	148	182	252	315
	Food	70.1	77.3	80.4	84.4	90.9	94.2
	Crushed	22.7	16.7	15.0	13.7	7.9	4.7
	Other[1]	7.3	6.0	4.6	1.9	1.2	1.1
World (thou. mt.)		16,385	16,869	18,883	21,377	24,729	29,063
	Food	31.0	31.6	34.5	35.9	37.1	41.1
	Crushed	58.8	56.6	54.0	54.0	53.2	49.2
	Other[1]	10.2	11.8	11.4	10.0	9.8	9.6

Source: Based on USDA data, PS&D database. Notes: [1]Includes feed, seed and waste.

Table 11. Five-year average utilization of peanuts for food and crushed for oil and meal in the 15 major consuming countries, 1972-2000

Country	1972-1975			1976-1980			1981-1985			1986-1990			1991-1995			1996-2000		
	Shares (%)		Total Use (th. mt.)	Shares (%)		Total Use (th. mt.	Shares (%)		Total Use (th. mt.)	Shares (%)		Total Us (th. mt.)	Shares (%)		Total Use (th. mt.)	Shares (%)		Total Use (th. mt.)
	Food	Crushed		Food	Crushed		Food	Crushed		Food	Crushed		Food	Crushed		Food	Crushed	
China	42.0	58.0	10,265	39.2	60.8	7,131	40.0	60.0	5,043	41.6	58.4	4,023	43.0	57.0	2,127	43.0	57.0	1,887
India	8.5	91.5	6,071	7.8	92.2	6,795	7.5	92.5	6,284	7.5	92.5	5,400	7.5	92.5	4,927	9.0	91.0	4,697
United States	78.2	21.8	1,240	69.2	30.8	1,366	77.0	23.0	1,264	77.1	22.9	1,087	72.6	27.4	1,038	66.0	34.0	1,191
Indonesia	95.1	4.9	1,090	95.5	4.5	1,063	94.6	5.4	793	94.3	5.7	716	93.2	6.8	656	86.6	13.4	488
Nigeria	60.6	39.4	1,036	71.0	29.0	361	62.4	37.6	286	57.2	42.8	386	26.8	73.2	420	18.9	81.1	488
Senegal	53.2	46.8	581	46.1	53.9	602	24.9	75.1	694	32.0	68.0	578	12.4	87.6	613	10.2	89.8	734
Myanmar	28.6	71.4	478	24.2	75.8	366	19.9	80.1	447	17.0	83.0	544	20.3	79.7	385	35.0	65.0	394
Zaire	63.6	36.4	405	62.9	37.1	429	64.0	36.0	358	63.4	36.6	343	63.3	36.7	297	63.2	36.8	263
Chad	77.0	23.0	363	59.6	40.4	200	65.2	34.8	97	62.1	37.9	66	62.1	37.9	66	62.4	37.6	61
Sudan	40.6	59.4	338	42.7	57.3	342	47.0	53.0	338	40.9	59.1	379	31.4	68.6	636	42.8	57.2	401
Mexico	98.0	2.0	203	98.3	1.7	130	99.0	1.0	105	97.9	2.1	58	95.9	4.1	58	88.8	11.2	43
Burkina	21.3	78.7	193	16.2	83.8	171	12.5	87.5	144	19.8	80.2	79	16.8	83.2	65	18.5	81.5	58
Argentina	11.1	88.9	184	18.0	82.0	112	14.2	85.8	195	15.3	84.7	167	6.9	93.1	363	13.3	86.7	317
Ghana	100.0	0.0	178	100.0	0.0	110	100.0	0.0	67	100.0	0.0	37	100.0	0.0	56	100.0	0.0	104
Vietnam	51.7	48.3	169	49.8	50.2	112	58.4	41.6	105	34.1	65.9	101	30.3	69.7	71	39.0	61.0	68
World	45.5	54.5	26,260	41.1	58.9	22,310	39.9	60.1	19,216	39.0	61.0	16,726	35.9	64.1	14,873	34.5	65.5	14,709

Source: Based on USDA data, PS&D database.

Table 12. Five-year average exports of peanuts (in thousand metric tons) and world percentage share ranked by country importance, 1972-2000

1972-1975			1976-1980			1981-1985			1986-1990			1991-1995			1996-2000		
Country	Exports		Country	Exports		Country	Exports		Country	Exports		Country	Exports		Country	Exports	
	Total	Share		Total	Share		Total	Share		Total	Share		Total	Share		Total	Share
United States	273	23.7	United States	409	39.0	United States	354	32.9	China	356	28.4	China	381	26.1	China	398	26.8
Sudan	207	17.9	Sudan	119	11.4	China	229	21.2	United States	328	26.1	United States	379	25.9	United States	294	19.8
India	118	10.3	China	93	8.8	Argentina	120	11.1	Argentina	120	9.6	Argentina	150	10.2	Argentina	212	14.3
Nigeria	83	7.2	Argentina	78	7.5	Sudan	56	5.2	Vietnam	84	6.7	Vietnam	127	8.7	Vietnam	173	11.6
S. Africa	73	6.3	S. Africa	50	4.7	Hong Kong	48	4.4	Netherlands	59	4.7	Netherlands	109	7.5	Netherlands	94	6.3
Brazil	64	5.5	India	41	4.0	Gambia	41	3.8	Gambia	48	3.9	India	52	3.5	India	93	6.3
Gambia	61	5.3	Gambia	41	3.9	India	39	3.6	Hong Kong	46	3.7	Gambia	43	3.0	S. Africa	44	2.9
Senegal	53	4.6	Brazil	31	3.0	Vietnam	34	3.2	India	40	3.2	S. Africa	31	2.1	Singapore	31	2.1
China	43	3.7	Senegal	28	2.6	Singapore	24	2.2	Sudan	36	2.9	Singapore	30	2.1	Gambia	28	1.9
Malawi	36	3.1	Netherlands	19	1.8	S. Africa	24	2.2	Singapore	36	2.8	Hong Kong	29	2.0	Germany	23	1.5
Mali	24	2.1	Malawi	18	1.7	Netherlands	22	2.0	S. Africa	28	2.2	Sudan	21	1.4	Hong Kong	20	1.3
Cameroon	23	2.0	Thailand	16	1.6	Brazil	15	1.4	Zambia	10	0.8	France	19	1.3	Myanmar	14	1.0
Niger	19	1.6	Vietnam	16	1.5	Thailand	14	1.3	Malawi	10	0.8	Myanmar	19	1.3	Sudan	11	0.8
Indonesia	15	1.3	Hong Kong	14	1.4	Malawi	10	0.9	Former FRG	10	0.8	Senegal	18	1.2	U.K.	11	0.7
Egypt	12	1.0	Egypt	13	1.3	Former FRG	7	0.7	Mali	5	0.4	Germany	16	1.1	Senegal	9	0.6
Rest of the World	52	4.5	Rest of the World	61	5.8	Rest of the World	41	3.8	Rest of the World	37	3.0	Rest of the World	38	2.6	Rest of the World	33	2.2
World	1153	100.0	World	1047	100.0	World	1077	100.0	World	1254	100.0	World	1463	100.0	World	1487	100.0
Of which:																	
Major 3 exp.	598	51.9	Major 3 exp.	621	59.3	Major 3 exp.	702	65.2	Major 3 exp.	804	64.1	Major 3 exp.	910	62.2	Major 3 exp.	904	60.8
Major 6 exp.	817	70.5	Major 6 exp.	790	75.4	Major 6 exp.	847	78.6	Major 6 exp.	996	79.4	Major 6 exp.	1199	82.0	Major 6 exp.	1264	85.0

Source: Based on USDA data, PS&D database.

Table 13. Five-year average imports of peanuts (in thousand metric tons) and world percentage share ranked by country importance, 1972-2000

1972-1975			1976-1980			1981-1985			1986-1990			1991-1995			1996-2000		
Country	Imports		Country	Imports		Country	Imports		Country	Imports		Country	Imports		Country	Imports	
	Total	Share		Total	Share		Total	Share		Total	Share		Total	Share		Total	Share
France	332	28.9	France	186	18.2	U.K.	130	12.1	Netherlands	178	14.2	Netherlands	220	15.7	Netherlands	220	15.1
Italy	125	10.9	U.K.	118	11.6	Netherlands	124	11.4	U.K.	150	11.9	Indonesia	179	12.8	Indonesia	164	11.2
U.K.	103	9.0	Japan	95	9.3	Japan	109	10.1	Japan	121	9.6	U.K.	120	8.6	U.K.	121	8.2
Japan	91	7.9	Netherlands	93	9.1	Canada	91	8.4	Former FRG	118	9.4	Japan	109	7.8	Canada	113	7.7
Canada	90	7.9	Canada	82	8.1	France	89	8.2	Singapore	91	7.3	Germany	96	6.9	Germany	104	7.1
Former FRG	84	7.3	Former FRG	74	7.3	Former FRG	88	8.1	Canada	81	6.5	Canada	92	6.6	Japan	103	7.1
Portugal	82	7.2	Italy	70	6.8	Former USSR	67	6.2	Indonesia	67	5.4	Singapore	90	6.4	Singapore	92	6.3
Netherlands	76	6.7	Portugal	50	4.9	Hong Kong	60	5.6	Hong Kong	62	5.0	France	89	6.3	Mexico	78	5.3
Switzerland	76	6.6	Former USSR	49	4.8	Indonesia	51	4.7	Former USSR	56	4.5	Hong Kong	53	3.8	United States	71	4.8
Former USSR	37	3.2	Switzerland	37	3.6	Singapore	46	4.3	France	55	4.4	Philippines	43	3.1	France	67	4.6
Spain	30	2.6	United States	37	3.6	Italy	42	3.9	Spain	32	2.6	Spain	35	2.5	Philippines	53	3.7
Bel-Lux	7	0.6	Spain	31	3.0	Spain	25	2.4	Italy	32	2.6	South Korea	32	2.3	Hong Kong	47	3.2
Malaysia	7	0.6	Hong Kong	23	2.2	Switzerland	25	2.3	Philippines	30	2.4	Mexico	30	2.2	Former USSR	45	3.1
Vietnam	3	0.3	Singapore	22	2.1	Portugal	24	2.2	Switzerland	30	2.4	Italy	29	2.1	Malaysia	34	2.4
Indonesia	2	0.2	Malaysia	10	1.0	S. Africa	17	1.6	Senegal	29	2.3	Malaysia	27	2.0	Spain	33	2.3
Rest of the World	2	0.2	Rest of the World	42	4.1	Rest of the World	92	8.5	Rest of the World	150	12.0	Rest of the World	153	10.9	Rest of the World	151	10.4
World	1145	100.0	World	1019	100.0	World	1080	100.0	World	1254	100.0	World	1399	100.0	World	1463	100.0
Of which:																	
Major 3 imp.	560	48.9	Major 3 imp.	399	39.2	Major 3 imp.	363	33.6	Major 3 imp.	449	35.8	Major 3 imp.	519	37.1	Major 3 imp.	505	34.5
Major 6 imp.	824	71.9	Major 6 imp.	649	63.7	Major 6 imp.	631	58.4	Major 6 imp.	738	58.9	Major 6 imp.	817	58.4	Major 6 imp.	825	56.4

Source: Based on USDA data, PS&D database.

Table 13 (page 19) presents the average annual imports by major countries. The composition of the major importers has remained approximately the same since the 1970s although with changes in their relative positions. As shown in table 13, the EU, together with Japan and Canada have historically been the main importers of peanuts. However during the 1990s, Indonesia has appeared as another major importer.

Note that the degree of concentration of the importers is smaller than in the case of the exporters. Thus, if one compares the average share in hands of the three major importers during the 1972-75 period with the average for 1996-2000, the share decreases from almost 50 percent to about 35 percent. Similarly, and contrasting with the figures observed for the exporter countries, the share of the 6 major importers of the total imports has steadily decreased over time, from an average of 72 percent during the 1972-75 period to an average 56 percent for the 1996-2000 period.

Policy Changes Related to the International Trade

The direction that the previous analyzed trends will take in the future will depend on how the countries respond to changes in the international and the domestic economic environment. The policy commitments agreed to by the countries under the Uruguay Round Agreement would certainly affect the amount of peanuts imported and exported. For instance, as summarized by Skinner (1999), "Switzerland agreed to eliminate the duty on peanuts for human consumption over a period of 6 years beginning in 1995. Poland also will eliminate the 15 percent duty on shelled peanuts over a period of 6 years. Korea reduced the in-quota tariff on shelled peanuts from 40 to 24 percent. On July 1 [1995], Korea also liberalized imports of roasted peanuts. Thailand agreed to halve the tariff on peanut butter to 30 percent or 2.5 baht per kilogram. Norway agreed to cut its tariff on peanut butter from 30 percent to 6 percent. Finland agreed to bind its tariff for roasted peanuts at duty free and reduce its tariff for peanut butter from 4.3 percent to duty free." (pp. 38)

The United States, one of the main markets for peanut products, has substantively modified its border policy with respect to peanuts. According to Skinner (1999), as a result of the Uruguay Round Agreement, the United States replaced its import quotas for peanuts with an ad-valorem tariff equivalent to 155 percent for shelled peanuts and 192.7 percent for in-shell peanuts in 1995 (the in-quota tariff rates are 9.35 cents per kilogram for peanuts in shell and 6.6 cents per kilogram for shelled peanuts). From these values, the over-quota tariffs rates have been reduced by 15 percent to 131.8 percent for shelled peanuts and 163.8 percent for in-shell peanuts. Furthermore, the U.S. import tariff rate quota for peanuts set at 33,770 metric tons in 1995 (The import tariff rate quota year for peanuts starts April 1 and ends March 31 of the following year.) has reached the committed 56,821 metric tons. The tariff rate quota includes four categories of peanuts: *in shell*, *shelled*, *blanched*, and *others*. For peanut butter, the quota was set at 19,150 metric tons in 1995 and reached 20,000 tons over 6 years. The in-quota rate set at 2 cents per kilogram in 1995 was eliminated in 1998. The over-quota for peanut butter is the same as for shelled peanuts.

It is important to note that a reduction of the U.S. border protection will imply a reduction in the domestic protection, too. This is important since, as mentioned in Changping *et al.* (1997), one of the major differences of U.S. peanuts and Chinese peanuts (major competitor at the world peanut market) is the cost associated with renting the peanut quota.

With respect to the international peanut market, China has just acceded to the World Trade Organization. Although China is already granted trade concessions of the Most Favored Nation status (MFN), it will probably negotiate for a share of the U.S. tariff rate quota in the upcoming WTO Trade meetings. According to FAS data, in year 2000, China was the third exporter of peanuts to the United States (behind Argentina and Mexico) with 4.9 thousand metric tons.

Argentina, another important competitor of U.S. peanuts and main exporter to the U.S. market, will probably be part of the Free Trade Area of the Americas (FTAA), under which Argentina would face an accelerated tariff reduction schedule and similar status that current NAFTA countries have. Furthermore, the recent severe devaluation of the Argentine currency (Peso) will give Argentina extra competitiveness in the export markets. However, it is important to note that the government is taxing peanut exports with a rate of 10 percent, which reduces the Argentine competitiveness.

Another source of competition in the U.S. domestic market will be the presence of exports from NAFTA countries, particularly peanuts from Mexico, which under the agreement will export to the United States in 2008 without tariffs. In 2000, Argentina exported

44.4 thousand metric tons of peanuts to the United States, while Mexico exported 5.6 thousand metric tons.

In addition to these events, it is important to add the recent emergence/re-emergence of a number of peanut exporters such as Brazil, South Africa and Australia, that are challenging U.S. exports in traditional markets such as the European Union.

Evolution of the Principal Price Indicators

Figure 3 presents the evolution since January 1977 of the United States, Argentina, and China monthly nominal average for shelled peanuts, 40/50 standard edible grade prices in Rotterdam, which is considered as world reference point.

The series presents two major jumps, the first one during the early 1980s and the second one during the early 1990s, both associated with short U.S. crops. In addition, the series presents high variability over time. In the case of U.S. prices, which presents information for the full sample period, the coefficient of variation was approximately 31 percent. However, as shown in figure 3, the series seems to present two different variability patterns. The first one that goes from the beginning of the sample to 1994 presents a coefficient of variability coefficient of 34 percent, while since 1995 the coefficient of variability was only 9 percent. It is important to note that the two sub-periods are also distinctive if we consider the series in real terms. Figure 4 (page 23) presents again the U.S. peanut price but deflated by the U.S. Consumer Price Index, base year 1982-84 = 100. For this series, the coefficients of vari-ability for the two sub-periods were approximately 41 percent and 10 percent, respectively. In addition, in contrast with the nominal series, the series in real terms presents a clear decreasing price trend over the entire period.

Figure 3 shows that Chinese and Argentine prices in Rotterdam generally range lower than the U.S. price. Thus, on average, for the 1983-2000 period the U.S. peanut price has been higher than the Argentinean price by US$ 50 and higher than the Chinese price by US$ 53. This spread in favor of the US peanuts is associated to factors such as quality and export reliability.

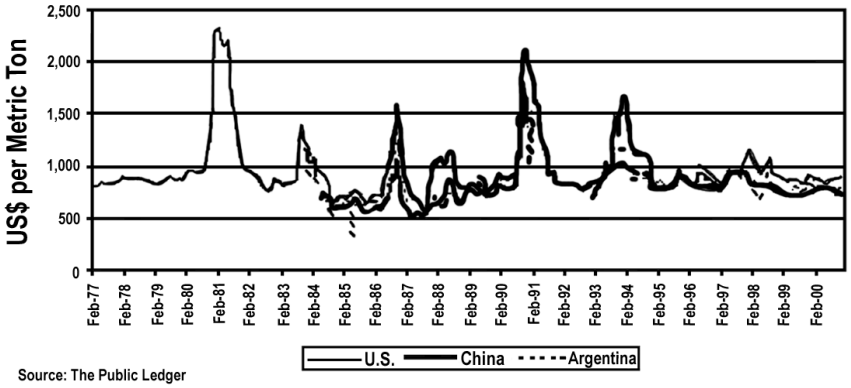
Final Remarks

The purpose of this publication has been to offer an overview of the main trends in the world peanut market in terms of production, consumption, trade, and prices based on data for the last 30 years.

In terms of production, the most significant change in the world peanut market is the remarkable increase in peanut production in Asia, particularly in the People's Republic of China after the reform in its agricultural sector. This development has had effect on the exported volume of peanuts, enabling China to surpass the other traditional exporters such as Argentina, India and United States.

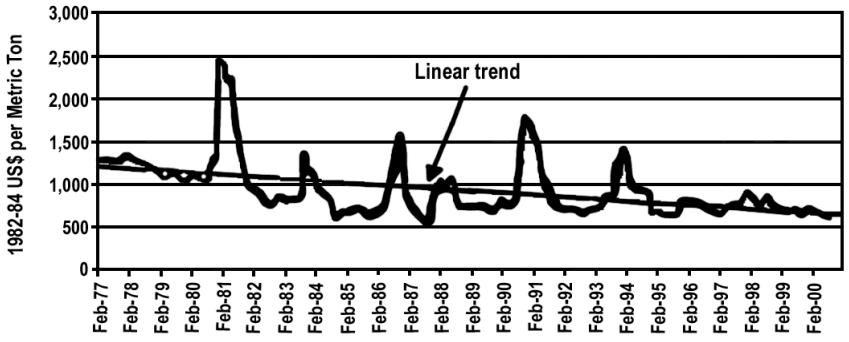
On the utilization side, the data shows an increase in the proportion of peanuts devoted to food purposes (excluding oil) in comparison with peanuts used to produce vegetable oil and meal (*i.e.*, for crushing purposes). This issue implies that the quality of peanuts in the trade market has increased due to the fact that the quality used for food purposes is higher than the one used for crushing (peanut oil and meal). The change affected mainly Africa exports, since Africa produces peanuts of lower quality (due to aflatoxin levels) than the peanuts produced in other continents.

Figure 3. Shelled Peanuts, International Prices 40/50s Standard Edible Grade



Source: The Public Ledger

Figure 4. U.S. Real International Price 40/50s Standard Edible Grade



Source: The Public Ledger and Bureau of Labor Statistics

In terms of the international trade, Argentina (since the early 1990s), China, and the United States have emerged as leading exporters of edible peanuts. On the other hand, the European Union and Asia have kept their position as major world importers of peanuts. In addition, while concentration seems to have increased on the export side (when considering the six major exporters), it has decrease on the import side. However, there are a number of possible future sources of instability related to recent development in export countries. This future instability may damage the trend observed in peanut prices since approximately 1994. The main events that could potentially impact the stability lie with the exporting countries. The new peanut program in the United States will eliminate the quota system and probably reduced domestic prices with a resulting decrease in production. The macro-economic instability in Argentina promise to affect their peanut production in two main ways. First, the combination of currency devaluation and export taxes applied creates uncertainty refraining exporters of offering contracts. Second, the monetary situation has created a problem of liquidity constraint that has affected the amount of operational credit available to producers. In China, the continuous problems related to peanut exports with above acceptable levels of aflatoxin, has forced EU to temporarily ban Chinese peanuts and to enforce legislation requiring a greater number of quality tests.

It is interesting to note that the long-term decreasing trend observed in prices indicates a supply level above the market needs. In this context the contraction of the supply due to the previously mentioned reasons would imply an increase in world prices. While the implications are difficult to anticipate, this situation might benefit U.S. exports, since it has the possibility of easily expanding production of good quality peanuts.

References

Carley, Dale H., and Stanley M. Fetcher. 1995. *Overview of World Peanut Market. In:* Advances in Pea-nut Science. Harold E. Pattee and H. Thomas Stalker (editors). Chapter 17. American Peanut Research and Education Society, Inc.:Stillwater.

Changping, Chen, Stanley M. Fletcher, and Dale H. Carley. July, 1997. *Competitiveness of Peanuts: United States vs. China.* University of Georgia, Research Bulletin, N. 430.

Economic Research Service (ERS). 2001. *Production, Supply, and Distribution (PS&D) database,* USDA.

Foreign Agricultural Service (FAS). June, 2000. *Oilseeds Markets and Trade.* Cotton, oilseeds, tobacco and seeds division. USDA.

Lin, Justin Y. (1992) Rural Reforms and Agricultural Growth in China. *American Economic Review,* 82 (1): 34-51.

Skinner, Robert A. 1999. *Issues Facing the U.S. Peanut Industry During the Seattle Round of the World Trade Organization. In:* Oil Crops Situation and Outlook/OCS-1999/October 1999 (Special Article).

Skully, David. 1999. *U.S. Tariff-Rate Quotas for Peanuts. In:* Oil Crops Situation and Outlook/OCS-1999/October 1999 (Special Article).

The Public Ledger, several numbers, Westminster, London, 1980-2001.

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