

Appendix D

Miscellaneous Commodity Statistics

Table D-I—Calculations of Acreage Requirements

General formula used:

(Import levels) x (percent of fatty acid)^a + (new crop yields/acre) x (percent of oil) x (percent of fatty acid)^b = acres of new crop needed

Imported crops	Import levels ^{b,c}	Percent of fatty acid ^d	New crops	Yield/acre ^{e,f}	Percent of oil ^g	Percent of fatty acids ^d
Coconut oil	1,120	45 Lauric	<i>Cuphea</i>	1,500	30	80 Launc
Palm kernel oil	403	50 Laurie	<i>Lesquerella</i>	1,500	25	65 Hydroxy
Castor oil	94	85 Hydroxy	Stokes Aster	1,500	35	70 Epoxy
Soybean oil	180	Converted to epoxy	<i>Vernonia</i>	1,500	25	70 Epoxy
Rapeseed oil	191	50 Erucic	<i>Crambe</i>	1,500	40	55 Erucic
<i>Hevea</i> rubber	1,790		Rapeseed	2,000	40	50 Erucic
Newsprint	7		Guayule	500		
			Kenaf	7		

NOTE: See table 5-2.

^aWhere applicable; ^bNewsprint imports in million tons (1 987 levels); ^cOil and rubber imports in million lbs (1 987 levels); ^dAssumed average values; ^eOilseed and guayule yields in lbs per acre (assumed values); ^fKenaf yields in tons per acre (assumed values).

Table D-2—World Production of Major Oils (million MT)

	1984-85	1985-86	1986-87	1987-88 ¹
Coconut oil	2.63	3.32	2.99	2.64
Linseed	0.64	0.59	0.61	0.63
Palm kernel oil	0.96	1.11	1.09	1.14
Palm oil	6.92	8.17	8.09	8.57
Rapeseed	5.60	6.18	6.80	7.48
Soybean	13.34	13.77	15.07	15.35
Sunflower	6.17	6.63	6.47	7.03
Tallow	6.52	6.40	6.39	6.23

¹Data for 1987-88 is preliminary.

SOURCE: U.S. Department of Agriculture, *Agricultural Statistics 1988* (Washington, DC: U.S. Government Printing Office, 1988).

Table D-3--Rapeseed Production in Selected Countries (1,000 MT)

Country	1976-78	1984	1985	1986
Canada	2,102	3,228	3,508	3,809
North Europe ^a	119	771	990	1,033
West Europe ^b	298	2,892	3,026	2,517
East Europe ^c	447	1,526	1,668	1,955
China	1,462	4,205	5,607	5,870
India	1,712	2,608	3,073	2,636

^aNorth Europe includes Sweden, Denmark, and Finland.

^bWest Europe includes France, United Kingdom, and West Germany.

^cEast Europe includes Czechoslovakia, East Germany, and Poland.

SOURCE: U.S. Department of Agriculture, Economic Research Service, "World Indices of Agricultural and Food Production, 1977-88," Statistical Bulletin No. 759, March 1988.

Table D-4--U.S. Vegetable Oil Imports

Oil	Quantity (MT)			Major supplier
	1985	1986	1987	
Castor	37,189	37,664	42,528	Brazil
Coconut	450,199	548,317	506,387	Philippines
Olive	43,959	54,010	63,736	Italy
Palm	225,410	279,597	187,899	Malaysia
Palm kernel	128,310	195,963	182,951	Malaysia
Rape	15,332	55,293	87,317	Canada, East Europe
Tang	6,939	5,575	5,895	Argentina

SOURCE: U.S. Department of Agriculture, Economic Research Service, Commodity Economics Division, "Foreign Agricultural Trade of the United States," Calendar Year 1987 Supplement, June 1988.

Table D-5-1987 U.S. Wax Imports^a

wax	Quantity(MT)	Dollar/MT	Dollar/lb
Beeswax	832	2,798	1.27
Candelilla wax	352	2,054	0.93
Carnauba wax	4,015	1,854	0.84

a The data is the price paid to the exporter, not the wholesale price and does not include costs of shipping, insurance, etc.

SOURCE: U.S. Department of Agriculture, Economic Research Service, Commodity Economics Division, "Foreign Agricultural Trade of the United States," Calendar Year 1987 Supplement, June 1988.

Table D-6—U.S. Imports of Guar Seeds

Year	Quantity (MT)	Value (\$1,000)
1985	804	83
1986	301	25
1987	12	4

SOURCE: U.S. Department of Agriculture, Economic Research Service, Commodity Economics Division, "Foreign Agricultural Trade of the United States," Calendar Year 1987 Supplement, June 1988.

Table D-7—U.S. Imports of Rubber, 1986-87

Year	Quantity (MT)	Value (\$1,000)
1986	777,577	612,060
1987	813,871	741,498

Note that the value does not include cost of shipping, insurance, etc.

SOURCE: U.S. Department of Agriculture, Economic Research Service, Commodity Economics Division, "Foreign Agricultural Trade of the United States," Calendar Year 1987 Supplement, June 1988.

Table D-8-Wholesale Prices of Major Oils

Oil source	Fatty acid	Dollar/lb ^a	Range ^b
Castor oil	Ricinoleic acid	0.39	0.33-0.73
Coconut	Lauric acid	0.23	0.16-0.60
Linseed	C ¹⁸ acids	0.25	0.25-0.33
Palm	Palmitric/Lauric acid	0.17	0.14-0.33
Rapeseed	Erucic acid	0.64	0.55-0.64
Soybean	Linoleic acid	0.15	0.15-0.31
Sunflower	Linoleic acid	0.16	0.16-0.34
Tallow	Stearic Acid	0.15	0.09-0.15
Tung	Multiunsaturated acids	0.53	0.39-1.19

^a1987 wholesale price per pound.

^bRange in wholesale price per pound, 1983-87.

SOURCE: U.S. Department of Agriculture, *Agricultural Statistics 1988* (Washington, DC: U.S. Government Printing Office, 1988)

Table D-9—Oil Content of U.S. Oilseed Crops

Oilseed crop	Percent oil
Cottonseed	18-20
Peanut	45-50
Rapeseed	40-45
Safflower	30-35
Soybean	18-20
Sunflower	35-45

SOURCE: Everett H. Pryde, "Chemicals and Fuels From Commercial Oilseed Crops," *Fuels and Chemicals From Oilseeds: Technology and Policy Options*, American Association for the Advancement of Science Selected Symposia Series No. 91, Eugene B. Shultz, Jr. and Robert P. Morgan (eds.) (Boulder, CO: Westview Press, Inc., 1984), pp. 51-69.

Table D-10-1987 Harvested Acreage and Value of Major U.S. Crops

Crop	Acreage (millions of acres)	Value (billions of dollars)
Barley	10	0.9
Corn	65	12.1
Oats	7	0.6
Sorghum	10	1.1
Soybeans	56	10.4
Wheat	56	5.3

SOURCE: U.S. Department of Agriculture, *Agricultural Statistics 1988* (Washington, DC: U.S. Government Printing Office, 1988).