

# Seed Industry in Thailand

2007

## I. Seed Used

Thailand is an agricultural country. Rice is counted as the most important economic crop of the country occupying approximately 50% (10.7 million ha) of total arable land (20.8 million ha). Most of seeds used are OP varieties and still come from their own saved. Qualified rice seeds production are about 50,000 ton distributed annually by the government sector. Corn and sorghum are considered as the first starting crops for hybrid varieties improvement in the country since Board of Investment (BOI) has called for seed industry investment in 1980. Now can be said that near by 100% of corn and sorghum crops field replaced by hybrid varieties as the same as vegetable crops that tend to be replaced by hybrid varieties in all producing scale in the near future.

Table I

1 ha = 6.25 Rai

Crops	Area planted (Rai)	Seed Used (Ton)	Value (million Baht)
Rice	65.00	900,000.00	10,800.00
Soy Bean	1.02	8,104.00	178.00
Mung Bean	1.42	7,085.00	177.00
Pea nut	0.28	5,620.00	101.00
Field Corn	7.00	21,000.00	1,680.00
Sun Flower	0.21	525.00	212.00
Vegetable	3.50	12,830.00	1,700.00
Flower seed	-	160.00	25.00
<b>Total</b>	<b>78.43</b>	<b>955,324.00</b>	<b>14,873.00</b>

## II. Private Seed Sector

There are 85 private seed companies are involving in seed business. 20 of them are found involving mainly on import seed, 37 seed companies concerning mainly on export seed and 28 seed companies involving both import and export seed. It is only 30% of those seed companies have invested in the business on import and export at the value of investment more than 10 million baht which most of them are foreign seed companies.

### III. Trend of import and export seed (Seed under Seed Act.)

During the past five years, seed industry in Thailand has made considerable progress with the development of high performance hybrid varieties of many kinds of vegetable, field crop and flower with seed production increasing not only in volume of export to 53 countries but also in value. Although many kinds of vegetable seed can be produced under the environment conditions in the country, but there are some kinds have to be imported due to the production require specific environment. The imported seeds is not only be traded in the country but also for re-export as well. Trend of imported and exported seed tend to increase year by year both in volume and value but small higher in imported as compare to exported seed as show in Table II.

**Table II**  
**Seed Imported and Exported Under Seed Act in 2004 – 2006**

#### Seed Imported

	2004		2005		2006	
	Kgs.	฿	Kgs.	฿	Kgs.	฿
Leek	618.14	643,774.62	0.40	83.98	130.00	214,614.53
Cauliflower	8,949.00	20,432,201.87	10,971.53	21,551,073.10	7,472.98	17,866,783.28
Cabbage	23,544.73	70,025,271.42	24,683.97	77,313,264.82	26,643.77	66,836,555.24
Field Corn	2,436,280.00	109,706,282.81	3,125,965.30	125,592,431.40	2,688,268.06	120,394,416.16
Sweet Corn	28,902.50	4,103,731.13	18,652.00	2,415,755.91	2,605.00	1,253,872.93
Sorghum	619,500.00	20,268,766.43	616,098.00	26,097,888.49	748,973.00	23,917,837.93
Chinese Kale	409,540.40	24,501,685.88	423,940.84	28,906,636.43	424,577.50	29,599,121.13
Cucumbers	4,624.92	4,122,315.45	5,140.89	5,849,172.44	6,030.08	9,187,833.08
Water melons	3,962.89	7,817,200.86	5,322.60	10,042,009.27	2,830.63	8,421,168.72
Mung Bean	264,000.00	2,818,863.39	432,000.00	5,677,824.30	216,005.00	4,828,732.13
Yard long Bean	885.90	147,066.09	3,581.10	184,290.01	2,411.00	283,256.38
Sweet pea	85,098.45	2,910,702.15	58,682.36	1,741,076.49	56,153.60	1,658,270.15
Soy Bean	31,600.00	6,750,177.52	13,620.00	2,369,792.02	12,210.00	2,011,262.14
Sun Flower	718,850.00	98,523,223.63	381,443.99	59,259,605.65	639,318.74	90,477,241.46
Broccoli	764.01	3,823,402.83	795.50	5,216,062.75	1,159.27	6,912,050.18
Pak Choy	320,724.60	17,168,904.09	317,453.85	20,226,417.88	279,335.10	18,297,813.38
Chinese Cabbage	66,932.42	24,313,652.19	48,804.44	19,284,122.04	91,772.66	19,310,048.19
Chinese Radish	162,217.83	20,771,794.27	195,142.55	26,716,137.50	307,244.74	31,105,670.03
Coriander	725,996.00	43,097,337.87	757,302.48	45,962,930.81	839,482.15	46,029,791.40

	2004		2005		2006	
	Kgs.	₱	Kgs.	₱	Kgs.	₱
Convolvulus	213,387.04	9,339,669.51	202,109.92	7,750,344.30	224,413.89	9,823,524.65
Mustard Green	57,376.40	3,288,154.68	50,567.20	3,072,201.72	68,066.52	5,294,310.07
Lettuces	49,751.49	14,436,910.62	21,431.46	9,752,056.50	11,096.45	12,810,008.42
Peppers	4,101.31	15,044,226.91	4,108.69	12,698,290.78	1,895.00	6,751,011.45
Tomatoes	1,888.86	9,356,037.62	1,361.40	8,968,053.92	966.27	7,092,442.74
Onion	10.90	52,404.00	130.47	633,986.51	3,486.34	14,685,692.97
Okra	-	-	-	-	140.00	164,604.35
Cantaloupe	-	-	-	-	69.95	1,038,633.88
Wax Gourd	-	-	-	-	0.06	22.20
Eggplant	-	-	-	-	1.20	23,137.25
Bitter Gourd	-	-	-	-	1,039.03	1,270,696.73
Loofah	-	-	-	-	165.00	79,915.18
<b>Total</b>	<b>6,242,054.79</b>	<b>466,304.84</b>	<b>6,719,310.94</b>	<b>527,281,508.02</b>	<b>6,663,962.99</b>	<b>557,640,338.33</b>

source : office of Agricultural Regulation, Dept. of Agriculture

### **Seed Exported**

	2004		2005		2006	
	Kgs.	₱	Kgs.	₱	Kgs.	₱
Cauliflower	1,034.63	4,738,990.80	745.87	3,864,788.00	855.44	5,160,746.30
Cabbage	5,285.49	22,615,639.00	8,532.10	33,717,240.30	6,652.66	34,590,164.00
Field Corn	9,083,596.74	607,977,725.22	9,730,658.68	610,733,621.23	10,259,768.65	666,674,558.61
Sweet Corn	110,336.24	30,675,819.76	191,517.65	57,119,179.80	248,752.20	69,056,035.07
Chinese Kale	3,079.15	552,364.00	4,066.95	901,614.10	3,471.80	893,576.00
Cucumbers	54,589.21	132,479,429.07	45,287.20	138,894,580.15	58,663.38	171,115,424.96
Water Melons	90,455.78	189,715,420.66	103,234.89	175,094,477.32	89,324.46	196,944,875.02
Yard long Bean	54,546.90	9,228,416.90	63,369.74	12,653,035.11	52,204.80	10,991,041.87
Sweet Peppers	17,390.10	2,262,855.27	45,966.00	5,982,702.00	19,910.50	2,402,548.64
Soy Bean	22,458.79	485,838.11	17,920.28	352,263.20	38,040.00	836,880.00
Sun Flower	51,263.60	7,321,750.36	2,847.70	698,991.31	2,446.80	378,711.69
Broccoli	453.12	3,546,749.20	581.42	3,836,240.00	554.25	4,513,825.00
Pak Choy	67,746.03	5,886,524.89	77,711.69	8,164,306.50	80,427.75	8,427,733.18
Chinese Cabbage	6,396.32	2,320,311.00	7,598.19	3,349,846.76	6,321.15	2,868,764.30

	2004		2005		2006	
	Kgs.	฿	Kgs.	฿	Kgs.	฿
Green Mustard	4,042.70	942,054.00	4,554.00	1,441,941.00	8,455.50	1,578,088.54
Lettuces	14,565.83	4,280,327.75	19,809.55	5,065,335.23	18,403.11	7,663,950.68
Chinese Radish	25,342.53	4,579,765.00	34,981.70	5,549,733.10	28,221.55	4,279,312.34
Coriander	186,879.20	10,377,658.50	198,977.60	11,696,021.00	192,875.26	10,423,850.11
Convolvulus	3,456,541.70	105,279,229.08	3,321,880.10	110,801,813.82	1,326,858.40	59,349,646.68
Peppers	18,220.41	119,920,833.44	21,297.75	132,871,568.99	30,123.06	181,434,500.59
Tomatoes	22,328.79	167,732,699.68	32,561.79	245,666,004.49	31,133.99	272,394,689.94
Onion	5.00	13,200.00	0.00	0.00	0.30	161.02
Sorghum	0.00	0.00	235.00	2,700.00	-	-
Mung Bean	0.00	0.00	6.21	242.15	-	-
Okra	-	-	-	-	1,744.00	1,004,544.00
Cantaloupe	-	-	-	-	139.62	1,865,415.24
Wax Gourd	-	-	-	-	90.00	286,680.00
Pumpkin	-	-	-	-	1,146.70	2,289,573.26
Eggplant	-	-	-	-	146.00	151,916.28
Bitter Gourd	-	-	-	-	3,170.25	4,678,729.18
Loofah	-	-	-	-	958.70	1,509,069.16
<b>Total</b>	<b>13,299,105.26</b>	<b>1,432,936,148.69</b>	<b>13,934,342.06</b>	<b>1,568,458,245.56</b>	<b>12,510,860.28</b>	<b>1,723,765,011.66</b>

source : office of Agricultural Regulation, Dept. of Agriculture

#### IV. Trend of import and export flower seed.

Since 1992, flower seed business has been considerable progressed rapidly on varieties improvement and seed trade. In 2006, there were 92 varieties flower seed imported into the country with the volume approximately 3.31 ton and 14.97 million Baht in value, while 106 varieties flower seed were exported at amount approximately 176 ton with 16 million Baht.

In 2007 counted up to August, 49 varieties of flower seed were imported with the volume 147 ton and 22 million Baht in value. Exporting is increasing up to approximately 1,820 ton of 60 varieties at the value of 8 million Baht.

## V. Seed Regulation

There are some major regulations under Seed Act and Plant Quarantine Act have been revised for the purpose of creating protection measures the right on parent line of seed from the pirate and creating protection measures to the restricted and prohibited plant pests from outside countries as listed under the notifications of Ministry of Agriculture and cooperatives are as follows:-

1. Seed Companies being involved in import and export seed have to inform the details on seed companies and countries who own the parent line, trade name of seed for sale, etc as required under the application form by the Department of Agriculture. All details will be approved by the authorized body appointed by the Department. The seeds will not be allowed to sale if those information found unbelievable.

2. There are three notifications have effected into force under plant Quarantine Act. Since July 31, 2007.

- a. Notification of Ministry of Agriculture and Cooperatives on Specification of plants and Carriers from Certain Sources as Prohibited Articles.

- b. Notification of Ministry of Agriculture and Cooperatives on Specification of Plant Pests as Prohibited Articles.

- c. Notification of Ministry of Agriculture and Cooperatives on Specification of Plants from Certain Sources as Restricted Articles.

### **These articles can be concluded that:-**

1. Plants or carriers, Plant pests from any source listed with the notifications are considered as prohibited and restricted articles.

#### **exception**

- a. Prohibited articles had passed the process of pest risk analysis in accordance with the criteria, methods and conditions set by the Director General of the Department of Agriculture, whereby such prohibition has already been withdrawn from the list as proclaimed

b. Seed under prohibited articles has been imported into Thailand or ever been imported within a period of the last 5 years for trade prior to notification entered into force are subjected to exemption and allowed to be imported until such time that the pest risk analysis for the prohibited articles concerned has been completed. In this regards, the National Plant Protection Organization (NPPO) of the exporting country has to make an importation request in writing with the evident document of previous importation to the director General of the Department of Agriculture.

c. The Importation of certain restricted articles shall comply with conditions stipulated by the Director General of the Department of Agriculture before import.

Please go to <http://www.doa.go.th> for more details.

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