

**APPENDIX: Relevant tables to this work**

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Thailand - WORLD</b>													<b>value : million baht</b>
Total Trade	3,730,945.11	4,022,155.80	4,121,639.32	5,262,197.86	5,633,665.52	5,698,833.52	6,464,405.99	7,674,756.11	9,192,715.63	9,880,294.78	10,172,305.63	11,813,853.63	9,795,136.40
Export	1,806,681.98	2,248,089.44	2,214,248.69	2,768,064.76	2,884,703.89	2,923,941.39	3,325,630.12	3,873,689.56	4,438,691.03	4,937,372.24	5,302,119.22	5,851,371.14	5,194,588.61
Import	1,924,263.13	1,774,066.37	1,907,390.62	2,494,133.10	2,748,961.63	2,774,892.14	3,138,775.87	3,801,066.55	4,754,024.60	4,942,922.54	4,870,186.41	5,962,482.49	4,600,547.78
Trade Balance	-117,581.15	474,023.07	306,858.07	273,931.66	135,742.26	149,049.25	186,854.25	72,623.01	-315,333.58	-5,550.30	431,932.81	-111,111.34	594,040.83
<b>growth rate (%)</b>													
Total Trade	15.02	7.81	2.47	27.67	7.06	1.16	13.43	18.72	19.78	7.48	2.96	16.14	-17.09
Export	28.04	24.43	-1.51	25.01	4.21	1.36	13.74	16.48	14.59	11.23	7.39	10.36	-11.22
Import	4.99	-7.81	7.52	30.76	10.22	0.94	13.11	21.10	25.07	3.97	-1.47	22.43	-22.84
<b>Thailand - CHINA</b>													<b>value : million baht</b>
Total Trade	124,963.06	147,650.60	165,163.61	248,977.94	292,265.86	364,298.22	487,129.18	615,317.49	816,322.19	967,501.91	1,075,675.85	1,202,661.77	1,134,887.15
Export	55,495.84	72,844.11	70,569.79	113,278.08	127,205.17	152,591.67	236,057.84	285,685.98	367,405.14	445,978.11	511,109.61	532,319.04	548,760.05
Import	69,467.22	74,806.49	94,593.82	135,699.85	165,060.68	211,706.56	251,071.34	329,631.52	448,917.04	521,523.79	564,566.24	670,342.74	586,127.09
Trade Balance	-13,971.39	-1,962.38	-24,024.03	-22,421.77	-37,855.51	-59,114.89	-15,013.50	-43,945.54	-81,511.90	-75,545.68	-53,456.63	-138,023.70	-37,367.04
<b>growth rate (%)</b>													
Total Trade	29.00	18.16	11.86	50.75	17.39	24.65	33.72	26.32	32.67	18.52	11.18	11.81	-5.64
Export	17.15	31.26	-3.12	60.52	12.29	19.96	54.70	21.02	28.60	21.39	14.60	4.15	3.09
Import	40.34	7.69	26.45	43.46	21.64	28.26	18.59	31.29	36.19	16.17	8.25	18.74	-12.56
<b>Share of trade with China among the total trade of Thailand (%)</b>													
Total Trade	3.35	3.67	4.01	4.73	5.19	6.39	7.54	8.02	8.88	9.79	10.57	10.18	11.59
Export share	3.07	3.24	3.19	4.09	4.41	5.22	7.10	7.38	8.28	9.03	9.64	9.10	10.56
Import share	3.61	4.22	4.96	5.44	6.00	7.63	8.00	8.67	9.44	10.55	11.59	11.24	12.74

Source: Information and Communication Technology Center with Cooperation of the Customs Department  
[http://www2.ops3.moc.go.th/menucomen/trade\\_sum/report.asp](http://www2.ops3.moc.go.th/menucomen/trade_sum/report.asp)

**Table AP.1** Trade summary between Thailand and China (Million baht).

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Thailand - WORLD</b>													value : million us\$
Total Trade	121,510.18	96,924.53	108,378.08	131,804.61	126,836.00	132,396.66	155,073.96	190,537.30	229,112.89	258,492.76	293,823.86	356,998.46	286,089.66
Export	58,329.39	54,490.06	58,463.44	69,624.23	65,183.23	68,156.31	80,039.98	96,502.82	110,937.66	129,720.43	153,864.96	177,775.20	152,426.29
Import	63,180.79	42,434.47	49,914.65	62,180.38	61,652.78	64,240.35	75,033.98	94,034.48	118,175.23	128,772.33	139,958.90	179,223.26	133,663.37
Trade Balance	-4,851.40	12,055.60	8,548.79	7,443.85	3,530.45	3,915.97	5,006.01	2,468.35	-7,237.57	948.10	13,906.07	-1,448.06	18,762.91
<b>growth rate (%)</b>													
Total Trade	-20.23	11.82	21.62	-3.77	4.38	17.13	22.87	20.25	12.82	13.67	21.50	-19.86	-17.09
Export	-6.58	7.29	19.09	-6.38	4.56	17.44	20.57	14.96	16.93	18.61	15.54	-14.26	-11.22
Import	-32.84	17.63	24.57	-0.85	4.20	16.80	25.32	25.67	8.97	8.69	28.05	-25.42	-22.84
<b>Thailand - CHINA</b>													value : million us\$
Total Trade	4,046.62	3,568.66	4,333.14	6,226.09	6,569.34	8,452.54	11,691.24	15,257.08	20,325.57	25,331.95	31,071.64	36,346.89	33,148.31
Export	1,774.55	1,766.75	1,860.95	2,836.47	2,873.36	3,555.04	5,688.92	7,113.45	9,167.55	11,727.95	14,846.75	16,190.58	16,119.39
Import	2,272.07	1,801.91	2,472.20	3,389.62	3,695.98	4,897.50	6,002.32	8,143.62	11,158.02	13,604.00	16,224.90	20,156.31	17,028.91
Trade Balance	-497.53	-35.17	-611.25	-553.15	-822.63	-1,342.47	-313.41	-1,030.17	-1,990.47	-1,876.05	-1,378.15	-3,965.72	-909.52
<b>growth rate (%)</b>													
Total Trade	5.72	-11.81	21.42	43.69	5.51	28.67	38.32	30.50	33.22	24.63	22.66	16.98	-8.80
Export	-5.45	-0.44	5.33	52.42	1.30	23.72	60.02	25.04	28.88	27.93	26.59	9.05	-0.44
Import	16.46	-20.69	37.20	37.11	9.04	32.51	22.56	35.67	37.02	21.92	19.27	24.23	-15.52
<b>Share of trade with China among the total trade of Thailand (%)</b>													
Total Trade	3.33	3.68	4.00	4.72	5.18	6.38	7.54	8.01	8.87	9.80	10.57	10.18	11.59
Export share	3.04	3.24	3.18	4.07	4.41	5.22	7.11	7.37	8.26	9.04	9.65	9.11	10.58
Import share	3.60	4.25	4.95	5.45	5.99	7.62	8.00	8.66	9.44	10.56	11.59	11.25	12.74

Source: Information and Communication Technology Center with Cooperation of the Customs Department

([http://www2.ops3.moc.go.th/menucomen/trade\\_sum/report.asp](http://www2.ops3.moc.go.th/menucomen/trade_sum/report.asp))

**Table AP.2** Trade summary between Thailand and China (Million US\$).



Quantity (tones)

Rank in 2007	Area	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
1	<b>China</b>	157,567	290,847	383,860	546,506	1,049,395	1,142,237	1,127,833	1,158,717	1,224,243	1,438,152
2	<b>Argentina</b>	102,265	93,140	80,082	82,259	62,380	86,709	100,637	97,301	100,047	120,490
3	<b>Spain</b>	49,600	56,633	65,070	56,780	56,749	57,870	65,993	65,111	50,608	49,625
4	<b>Netherlands</b>	21,411	15,647	14,512	19,185	9,467	9,457	8,945	13,279	13,797	22,707
5	<b>Malaysia</b>	10,864	16,594	10,711	13,357	21,516	34,496	50,415	42,591	32,363	22,383
6	<b>France</b>	13,494	13,751	14,052	17,385	18,148	13,826	12,314	12,462	13,436	12,701
7	<b>Mexico</b>	23,335	17,121	17,745	17,472	12,012	10,565	9,357	10,739	11,731	11,185
8	<b>Italy</b>	7622	7,014	6955	7,721	8,466	9,426	10,256	8,894	9,214	8,505
9	<b>United Arab Emirates</b>	8,800	18,000	8,000	4,150	24,633	18,744	7,978	16,609	4,403	8,047

Source: FAO (<http://faostat.fao.org>)

**Table AP.3** Top nine garlic export countries by quantity.



Quantity (tones)

Rank in 2007	Area	2000	2001	2002	2003	2004	2005	2006	2007
1	Indonesia	174,036	205,470	226,085	218,538	243,721	283,283	296,476	341,102
2	Brazil	88,897	77,827	79,334	91,565	101,164	132,581	120,565	133,095
3	Viet Nam	16,300	N/D	67,371	91,614	81,370	72,766	87,619	126,621
4	Bangladesh	N/D	N/D	37,602	40,114	26,997	22,335	20,578	109,443
5	Malaysia	55,056	67,567	89,435	76,345	113,743	102,972	114,494	97,593
6	United States of America	28,709	36,550	48,159	45,786	56,100	69,640	79,847	88,728
7	Pakistan	12,341	15,766	25,461	49,284	31,570	51,030	48,789	64,047
8	Philippines	N/D	N/D	16,969	18,975	21,223	49,925	57,465	63,882
9	United Arab Emirates	20,000	27,300	42,781	30,638	22,178	24,832	34,133	40,327
10	Russian Federation	19,008	17,099	27,076	49,097	43,745	41,133	37,077	38,577
11	Netherlands	11,532	12,161	N/D	N/D	N/D	18,510	24,830	36,226
12	Saudi Arabia	14,304	17,888	29,971	28,982	26,640	27,670	27,916	30,238
13	Colombia	18,642	21,073	25,052	23,053	20,397	22,530	28,124	28,776
14	Sri Lanka	13,661	15,682	19,018	19,492	17,581	18,426	19,723	27,647
15	Italy	24,237	27,750	28,346	31,790	31,750	26,601	30,120	26,364
16	France	26,018	32,178	31,659	28,525	28,234	27,498	29,358	25,899
17	Japan	29,225	28,915	25,891	27,639	28,804	30,268	30,268	22,117
18	Thailand	N/D	N/D	15,722	44,723	55,503	47,803	28,966	21,464

Source: FAO (<http://faostat.fao.org>)

**Table AP.4** Top 18 garlic import countries by quantity.

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Production (tonnes)

Rank in 2008	Area	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
1	China	5,690,336	5,814,066	6,186,289	7,486,112	7,894,066	9,080,049	10,078,351	10,593,366	11,083,014	11,567,524	12,064,662	12,575,036
2	India	484,400	570,700	495,300	524,600	496,800	500,000	457,000	691,100	646,600	598,200	645,000	645,000
3	Korea, Republic of	393,834	393,903	483,778	474,388	406,385	391,182	378,846	357,824	374,980	331,379	347,546	375,463
4	Russian Federation	168,890	161,380	180,650	195,110	228,380	230,200	219,570	236,170	257,280	255,860	259,630	226,670
5	Egypt	159,111	173,555	224,133	266,555	215,420	190,000	207,757	187,833	162,077	164,260	234,570	258,608
6	United States of America	254,500	249,930	335,660	253,150	266,570	256,280	283,090	236,960	216,410	224,480	221,810	194,230
7	Myanmar	45,560	53,326	53,165	67,011	82,187	96,876	120,333	125,000	140,700	146,200	147,000	147,000
8	Bangladesh	N/D	N/D	N/D	N/D	N/D	N/D	N/D	73,390	90,170	102,485	176,710	144,817
9	Spain	204,066	169,600	178,074	162,833	183,016	195,178	170,161	165,425	136,400	145,372	151,700	142,500
10	Argentina	116,598	148,120	145,000	149,186	133,818	125,228	145,891	142,735	116,441	135,505	140,000	140,000
16	Thailand	121,951	117,755	126,000	132,000	126,423	104,832	104,832	95,909	106,598	81,376	74,711	85,648

Source: FAO (<http://faostat.fao.org>)

**Table AP.5** Top 10 garlic producing countries plus Thailand (by quantity).

(USD/tonnes)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>China</b>	413 F	445 F	400	281	307	389	338	511	387	332	343	367	347 F	367 F	384 F	422 F	482 F	533 F
<b>Thailand</b>	702	668	333	470	1,271	1,360	691	433	828	620	467	572	661	483	546	727	1,003	531
<b>Thailand (Bahr)</b>	17,900	16,970	8,430	11,820	31,670	34,470	21,680	17,910	31,300	24,880	20,750	24,590	27,410	19,400	21,960	27,520	34,600	17,680

F=FAO estimate

Source: FAOSTAT | © FAO Statistics Division 2010 | 07 October 2010

**Table AP.6** Garlic producer price of China and Thailand.

Harvested area (Ha)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
China	438,985	457,321	487,828	559,833	584,924	627,428	632,350	637,962	648,136	656,574	691,556	694,040
Thailand	no data	no data	21,760	23,520	22,080	21,802	20,808	15,516	16,831	13,331	12,094	13,821

Source: FAO (<http://faostat.fao.org>), (accessed on 27th April 2010).

**Table AP.7** Garlic harvested area of China and Thailand.

Quantity (tonnes)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
China	5,690,336	5,814,066	6,186,289	7,486,112	7,894,066	9,080,049	10,078,351	10,593,366	11,083,014	11,567,524	12,064,662	12,575,036
Thailand	121,951	117,755	126,000	132,000	126,423	104,832	104,832	95,909	106,598	81,376	74,711	85,648

Source: FAO (<http://faostat.fao.org>), (accessed on 27th April 2010).

**Table AP.8** Garlic yield of China and Thailand.

Quantity (tonnes)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
China	12.96	12.71	12.68	13.37	13.50	14.47	15.94	16.61	17.10	17.62	17.45	18.12
Thailand	no data	no data	5.79	5.61	5.73	4.81	5.04	6.18	6.33	6.10	6.18	6.20

Source: FAO (<http://faostat.fao.org>), (accessed on 27th April 2010).

**Table AP.9** Garlic yield per hectare of China and Thailand.

Planted area (rai)

Region/ Province	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Whole Kingdom	172,207	176,617	215,597	233,411	181,284	160,699	150,772	157,033	154,391	159,766	166,541	171,212	148,116
Northern	136,566	141,351	179,426	191,670	142,515	126,604	146,067	147,174	146,786	151,461	156,598	160,651	139,630
Northeastern	4,616	4,960	5,109	6,441	5,919	4,881	4,705	4,545	6,695	7,307	9,304	9,462	7,427
Central Plain	0	0	0	0	0	0	0	0	0	0	639	1,099	609
<b>Northern</b>													
Chiang Rai	14,580	15,866	18,788	18,981	11,034	9,306	10,220	12,116	10,678	12,115	13,624	11,461	9,283
Phayao	11,294	9,992	16,385	20,229	12,316	10,197	10,991	10,732	10,747	10,497	10,931	9,812	10,676
Lampang	9,003	9,569	11,548	14,009	14,309	9,215	9,676	11,517	10,526	9,703	9,827	11,159	9,662
Lamphun	38,556	40,033	46,781	50,606	36,858	32,350	39,464	36,560	35,432	36,957	37,401	40,344	31,322
Chiang Mai	51,586	52,821	71,130	72,503	49,201	47,611	51,565	52,741	51,824	53,418	54,261	55,685	53,310
Mae Hong Son	11,547	10,415	11,873	12,444	9,085	10,534	13,605	14,844	15,476	17,476	18,962	19,738	16,386
Tak	-	-	-	-	3,567	2,700	2,854	2,205	2,954	2,751	3,127	3,935	2,841
Phrae	-	-	-	-	1,384	958	1,276	1,247	1,833	2,363	2,194	2,119	1,040
Nan	-	-	-	-	2,213	2,079	2,791	2,482	2,563	2,594	2,688	2,816	1,487
Sukhothai	-	-	-	-	-	-	-	-	1,887	576	-	-	-
Uttaradit	-	2,655	2,921	2,898	2,548	1,654	3,625	2,730	1,533	2,029	2,233	2,292	1,972
Phetchabun	-	-	-	-	-	-	-	-	1,333	982	1,350	1,290	1,651
<b>Northeastern</b>													
Si Sa Ket	4,616	4,960	5,109	6,441	5,919	4,881	4,705	4,545	4,793	4,994	5,010	5,116	4,087
Chaiyaphum	-	-	-	-	-	-	-	-	-	-	1,096	1,046	854
Nakhon Ratchasima	-	-	-	-	-	-	-	-	805	715	872	946	991
Nakhon Phanom	-	-	-	-	-	-	-	-	1,097	1,261	1,013	930	604
Surin	-	-	-	-	-	-	-	-	-	-	950	1,029	891
Buri Ram	-	-	-	-	-	-	-	-	-	337	363	395	-
<b>Central Plain</b>													
Saraburi	-	-	-	-	-	-	-	-	-	-	639	1,099	609
others	31,025	30,405	31,062	35,230	32,850	29,214	-	5,314	-	-	-	-	-

Source: Agricultural Statistics of Thailand 1984-2008

**Table AP.10** Garlic planted area in Thailand.

Planted area (rai)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Region/ Province
136,561	137,814	149,690	140,973	131,686	132,000	97,629	105,986	84,178	76,324	87,422	70,474	Whole Kingdom
131,920	133,397	140,332	131,842	123,561	n/a	91,565	100,563	81,099	73,059	82,831	66,893	Northern
4,129	3,871	8,706	8,514	7,538	n/a	5,635	5,007	3,079	3,265	4,591	3,581	Northeastern
512	546	652	617	587	n/a	429	416	-	-	-	-	Central Plain
												Northern
11,620	12,201	13,654	13,377	12,829	n/a	9,272	9,179	9,059	7,772	4,832	3,681	Chiang Rai
8,935	9,967	12,349	14,266	13,254	n/a	10,789	11,182	11,022	9,161	13,657	9,577	Phayao
10,578	11,035	11,888	10,466	9,942	n/a	8,026	8,267	7,854	8,894	9,752	7,787	Lampang
28,162	26,436	26,553	22,546	21,886	n/a	16,514	17,835	15,256	9,211	9,395	7,487	Lamphun
50,184	49,595	50,232	47,604	42,351	n/a	26,412	29,773	22,714	23,051	27,533	22,790	Chiang Mai
14,526	15,828	17,105	16,490	16,474	n/a	15,692	19,603	10,706	10,920	12,875	11,364	Mae Hong Son
2,437	2,745	2,769	2,547	2,329	n/a	1,514	1,528	1,573	1,512	1,859	1,447	Tak
849	1,219	1,079	968	938	n/a	547	541	528	517	541	511	Phrae
1,496	1,768	1,877	1,889	1,835	n/a	1,427	1,284	1,155	832	1,052	974	Nan
-	-	-	-	-	-	-	-	-	-	-	-	Sukhothai
1,236	1,477	1,496	387	400	n/a	380	348	313	291	348	339	Uttaradit
1,897	1,126	1,330	1,302	1,323	n/a	992	1023	919	898	987	936	Phetchabun
												Northeastern
3,302	3,871	5,446	5,639	4,706	n/a	3,880	3,492	1,771	1,881	1,129	1,543	Si Sa Ket
-	-	2,028	1,895	1,837	n/a	981	780	663	597	1,984	592	Chaiyaphum
-	-	1,232	980	995	n/a	774	735	645	787	637	756	Nakhon Ratchasima
-	-	-	-	-	-	-	-	-	-	841	690	Nakhon Phanom
827	-	-	-	-	-	-	-	-	-	-	-	Surin
-	-	-	-	-	-	-	-	-	-	-	-	Buri Ram
												Central Plain
512	546	652	617	587	n/a	429	416	-	-	-	-	Saraburi
-	-	-	-	-	-	-	-	-	-	-	-	others

Source: Agricultural Statistics of Thailand 1984-2008

Table AP.10 Garlic planted area in Thailand (cont).

Harvested area (rai)

Region/ Province	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Whole Kingdom	171,453	176,075	214,771	233,208	181,154	160,209	150,551	153,842	151,654	158,830	164,451	168,509	146,798
Northern	136,102	140,941	178,633	191,547	142,515	126,499	145,846	144,335	144,371	150,653	154,932	158,147	139,754
Northeastern	4,331	4,874	5,098	6,435	5,820	4,841	4,705	4,381	7,283	8,177	8,880	9,263	6,435
Central Plain	0	0	0	0	0	0	0	0	0	0	639	1,099	609
<b>Northern</b>													
Chiang Rai	14,515	15,758	18,720	18,812	11,034	9,306	10,220	11,900	10,464	11,788	13,401	11,461	9,283
Phayao	11,294	9,986	16,277	20,289	12,316	10,197	10,991	10,531	10,425	10,406	10,693	9,766	10,551
Lampang	9,003	9,569	11,548	14,009	14,309	9,125	9,676	11,208	10,421	9,617	9,777	10,955	9,662
Lamphun	38,529	40,016	46,508	50,606	36,858	32,350	39,415	35,392	35,078	36,906	37,330	39,768	31,267
Chiang Mai	51,301	52,795	70,786	72,494	49,201	47,606	51,393	52,098	51,306	53,363	53,662	54,695	53,221
Mae Hong Son	11,460	10,162	11,873	12,439	9,085	10,534	13,605	14,598	15,321	17,343	18,659	19,346	16,811
Tak	-	-	-	-	3,567	2,700	2,854	2,149	2,368	2,715	3,093	3,892	2,841
Phrae	-	-	-	-	1,384	958	1,276	1,247	1,778	2,363	2,088	2,018	1,040
Nan	-	-	-	-	2,213	2,069	2,791	2,482	2,512	2,577	2,688	2,800	1,487
Sukhothai	-	-	-	-	-	-	-	-	1,887	576	-	-	-
Uttaradit	-	2,655	2,921	2,898	2,548	1,654	3,625	2,730	1,518	2,029	2,218	2,156	1,940
Phetchabun	-	-	-	-	-	-	-	-	1,293	970	1,323	1,290	1,651
<b>Northeastern</b>													
Si Sa Ket	4,331	4,874	5,098	6,435	5,820	4,841	4,705	4,381	4,697	4,880	4,827	5,082	3,095
Chaiyaphum	-	-	-	-	-	-	-	-	837	998	1,007	1,023	854
Nakhon Ratchasima	-	-	-	-	-	-	-	-	652	715	872	848	991
Nakhon Phanom	-	-	-	-	-	-	-	-	1,097	1,261	1,002	905	604
Surin	-	-	-	-	-	-	-	-	-	-	887	1,010	891
Buri Ram	-	-	-	-	-	-	-	-	-	323	285	395	-
<b>Central Plain</b>													
Saraburi	-	-	-	-	-	-	-	-	-	-	639	1,099	609
others	31,020	30,260	31,040	35,226	32,819	28,869	-	5,126	-	-	-	-	-

Source: Agricultural Statistics of Thailand 1984-2008

**Table AP.11** Garlic harvested area in Thailand.

## Harvested area (rai)

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Region/ Province
146,798	134,813	136,092	147,373	138,028	130,051	130,000	96,976	105,191	83,317	75,587	86,383	69,338	Whole Kingdom
139,754	130,469	132,028	139,099	128,924	122,024	n/a	90,967	100,048	80,269	72,354	81,839	65,880	Northern
6,435	3,832	3,523	7,628	8,487	7,460	n/a	5,584	4,734	3,048	3,233	4,544	3,458	Northeastern
609	512	541	646	617	567	n/a	425	409	-	-	-	-	Central Plain
													Northern
9,283	11,504	12,079	13,622	13,341	12,795	n/a	9,245	9,087	8,968	7,694	4,771	3,626	Chiang Rai
10,551	8,933	9,867	12,310	14,218	13,151	n/a	10,706	11,126	10,912	9,069	13,466	9,433	Phayao
9,662	10,472	10,925	11,806	10,464	9,893	n/a	7,987	8,226	7,775	8,805	9,606	7,671	Lampang
31,267	27,880	26,172	26,022	22,517	21,667	n/a	16,394	17,814	15,104	9,119	9,255	7,375	Lamphun
53,221	49,682	49,099	50,138	44,860	41,395	n/a	26,227	29,565	22,487	22,842	27,258	22,448	Chiang Mai
16,811	14,191	15,670	16,677	16,475	16,391	n/a	15,614	19,567	10,598	10,811	12,747	11,193	Mae Hong Son
2,841	2,385	2,718	2,769	2,545	2,306	n/a	1,499	1,513	1,566	1,503	1,840	1,425	Tak
1,040	849	1,182	1,079	964	926	n/a	540	535	522	512	534	505	Phrae
1,487	1,496	1,768	1,852	1,869	1,795	n/a	1,396	1,258	1,143	824	1,041	959	Nan
-	-	-	-	-	-	-	-	-	-	-	-	-	Sukhothai
1,940	1,199	1,433	1,496	370	387	n/a	376	344	297	288	343	334	Uttaradit
1,651	1,878	1,115	1,328	1,301	1,318	n/a	983	1013	897	887	978	911	Phetchabun
													Northeastern
3,095	3,005	3,523	4,771	5,631	4,695	n/a	3,868	3,288	1,753	1,862	1,121	1,469	Si Sa Ket
854	-	-	1,777	1,876	1,780	n/a	950	757	656	592	1,962	562	Chaiyaphum
991	-	-	1,080	980	985	n/a	766	689	639	779	629	748	Nakhon Ratchasima
604	-	-	-	-	-	-	-	-	-	-	832	679	Nakhon Phanom
891	827	-	-	-	-	-	-	-	-	-	-	-	Surin
-	-	-	-	-	-	n/a	-	-	-	-	-	-	Buri Ram
													Central Plain
609	512	541	646	617	567	n/a	425	409	-	-	-	-	Saraburi
-	-	-	-	-	-	-	-	-	-	-	-	-	others

Source: Agricultural Statistics of Thailand 1984-2008

Table AP.11 Garlic harvested area in Thailand (cont).

Region/ Province	Planted area (rai)			Yield (tonnes)		
	2002	2004	Target in 2004	2002	2004	Target in 2004
Whole Kingdom	131,686	97,629	80,000	104,832	95,909	76,000
Northern	123,561	91,565	-	98,918	91,008	-
Northeastern	7,538	5,635	-	5,503	4,586	-
Central Plain	587	429	-	411	315	-
North						
Chiang Rai	12,829	9,272	7,200	9,890	8,929	7,000
Phayao	13,254	10,789	8,400	8,642	8,502	6,900
Lampang	9,942	8,026	6,100	6,651	6,493	5,000
Lamphun	21,886	16,514	13,400	18,165	17,406	12,800
Chiang Mai	42,351	26,412	26,400	38,625	30,321	27,500
Mae Hong Son	16,474	15,692	9,500	13,785	15,629	9,000
Tak	2,329	1,514	1,500	1,917	1,432	1,370
Phrae	938	547	500	626	392	400
Nan	1,835	1,427	1,100	1,231	870	900
Uttaradit	400	380	-	284	290	-
Phetchabun	1,323	992	-	902	744	-
Northeast						
Si Sa Ket	4,706	3,880	3,200	3,388	3,225	2,700
Chaiyaphum	1,837	981	-	1,336	749	-
Nakhon Ratchasima	995	774	-	779	609	-
Central Plain						
Saraburi	587	429	-	411	315	-
others			2,700			2,430

Source: "Agricultural Statistics of Thailand 1984-2008," and Office of Agricultural Economy, 'Project report for reduction of garlic production area Year 2003-04'. (from intra report by Focus on the Global South).

**Table AP.12** Garlic targeted area of reduction in Thailand in 2004.

Production (tonnes)

Region/ Province	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Whole Kingdom	107,985	97,112	121,660	133,631	110,951	104,094	107,886	115,577	110,433	121,252	132,062	147,263	119,428
Northern													
Northeastern													
Central Plain													
Northern													
Chiang Rai	8,375	8,425	10,145	9,092	6,466	4,662	5,447	9,051	5,307	9,038	10,872	9,066	6,907
Phayao	6,279	4,936	8,635	9,825	5,407	4,140	5,232	5,323	6,126	6,235	6,591	5,995	5,947
Lampang	4,511	5,206	5,866	7,383	8,070	4,663	5,583	5,689	5,084	4,541	4,864	7,242	6,029
Lamphun	27,818	28,624	33,951	32,337	27,607	26,301	32,203	30,052	28,771	31,007	32,240	24,187	25,903
Chiang Mai	34,269	26,727	37,485	45,677	33,457	33,851	41,200	45,252	43,429	46,474	48,564	55,574	48,565
Mae Hong Son	7,117	5,937	6,779	7,317	5,169	6,352	10,136	9,797	10,911	12,513	15,283	17,744	14,664
Tak	-	-	-	-	2,144	1,917	1,333	1,947	2,339	2,366	2,755	3,758	2,324
Phrae	-	-	-	-	696	449	440	529	711	922	1,066	1,246	684
Nan	-	-	-	-	954	992	1,189	871	1,297	1,227	1,449	1,597	870
Sukhothai	-	-	-	-	-	-	-	-	836	251	-	-	-
Uttaradit	-	1,341	1,446	1,516	1,519	973	2,039	1,257	756	1,128	1,585	1,430	1286
Phetchabun	-	-	-	-	-	-	-	-	704	562	869	918	1319
Northeastern													
Si Sa Ket	1,984	2,143	2,350	3,137	3,563	2,675	3,084	3,013	2,885	3,366	3,402	4,635	2,865
Chaiyaphum	-	-	-	-	-	-	-	-	490	545	584	507	433
Nakhon Ratchasima	-	-	-	-	-	-	-	-	378	366	440	656	483
Nakhon Phanom	-	-	-	-	-	-	-	-	409	540	481	534	274
Surin	-	-	-	-	-	-	-	-	-	-	402	513	421
Buri Ram	-	-	-	-	-	-	-	-	-	171	193	221	-
Central Plain													
Saraburi	-	-	-	-	-	-	-	-	-	-	422	810	454
others	17,632	13,773	15,003	17,347	15,899	17,119	-	2,776	-	-	-	-	-

Source: Agricultural Statistics of Thailand 1984-2008

Table AP.13 Garlic yield of Thailand.

Production (tonnes)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Region/ Province
117,755	126,119	131,581	126,423	104,832	105,000	95,909	106,598	81,376	74,711	85,648	71,433	Whole Kingdom
114,604	122,713	122,995	118,312	98,918	n/a	91,008	102,745	79,164	72,315	82,273	68,773	Northern
2,758	2,996	8,102	7,648	5,503	n/a	4,586	3,546	2,212	2,396	3,375	2,660	Northeastern
393	410	484	463	411	n/a	315	307	-	-	-	-	Central Plain
												Northern
9,877	10,773	11,715	11,370	9,890	n/a	8,929	9,020	8,461	7,391	4,697	3,659	Chiang Rai
6,013	7,246	8,669	10,200	8,642	n/a	8,502	8,927	8,421	7,100	10,625	7,518	Phayao
6,664	7,989	8,476	7,572	6,651	n/a	6,493	6,810	6,197	7,089	7,850	6,105	Lampang
25,177	25,326	23,606	20,472	18,165	n/a	17,406	19,201	15,943	9,754	10,034	8,281	Lamphun
49,331	51,480	49,579	49,127	38,625	n/a	30,321	34,734	25,962	26,739	32,131	26,892	Chiang Mai
11,955	16,881	14,727	14,396	13,785	n/a	15,629	20,113	10,535	10,865	12,938	12,796	Mae Hong Son
1,874	2,309	2,337	2,152	1,917	n/a	1,432	1,523	1,540	1,483	1,815	1,428	Tak
507	786	701	641	626	n/a	392	400	377	376	398	388	Phrae
1,183	1,155	1,239	1,262	1,231	n/a	870	835	735	537	686	640	Nan
-	-	-	-	-	-	-	-	-	-	-	-	Sukhothai
811	1010	1032	274	284	n/a	290	283	239	224	270	269	Uttaradit
1212	758	914	893	902	n/a	744	899	754	757	829	797	Phetchabun
												Northeastern
2,354	2,996	4,259	4,336	3,388	n/a	3,225	2,450	1,257	1,369	1456	1204	Si Sa Ket
-	-	2,464	2,139	1,336	n/a	749	590	507	464	497	429	Chaiyaphum
-	-	1379	1173	779	n/a	609	506	448	563	612	540	Nakhon Ratchasima
-	-	-	-	-	-	-	-	-	-	810	487	Nakhon Phanom
404	-	-	-	-	-	-	-	-	-	-	-	Surin
-	-	-	-	-	-	-	-	-	-	-	-	Buri Ram
												Central Plain
393	410	484	463	411	n/a	315	307	-	-	-	-	Saraburi
-	-	-	-	-	-	-	-	-	-	-	-	others

Source: Agricultural Statistics of Thailand 1984-2008

Table AP.13 Garlic yield of Thailand (cont).

Yield per *rai* (kgs.)

Region/ Province	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Whole Kingdom	630	552	566	573	612	650	717	751	728	763	803	874	814
Northern	608	555	558	551	572	579	575	631	613	632	711	764	733
Northeastern	458	440	461	487	612	553	655	688	538	541	567	640	569
Central Plain	-	-	-	-	-	-	-	-	-	-	893	737	745
<b>Northern</b>													
Chiang Rai	577	535	542	483	586	501	533	761	507	767	811	791	744
Phayao	556	494	530	484	439	406	476	505	588	599	616	614	563
Lampang	501	544	508	527	564	511	577	508	488	472	497	661	624
Lamphun	722	715	730	639	749	813	817	849	820	840	864	875	828
Chiang Mai	668	506	530	630	680	711	802	869	846	871	905	1,016	912
Mae Hong Son	621	584	571	568	569	603	745	671	712	722	819	916	872
Tak	-	-	-	-	601	710	467	906	988	871	891	966	818
Phrae	-	-	-	-	503	469	345	424	400	390	511	617	658
Nan	-	-	-	-	431	480	426	351	516	476	539	570	585
Sukhothai	-	-	-	-	-	-	-	-	443	436	-	-	-
Uttaradit	-	505	495	523	596	588	562	467	498	556	715	663	663
Phetchabun	-	-	-	-	-	-	-	-	544	579	657	712	799
<b>Northeastern</b>													
Si Sa Ket	458	440	461	487	612	553	655	688	614	690	705	912	926
Chaiyaphum	-	-	-	-	-	-	-	-	585	546	580	496	507
Nakhon Ratchasima	-	-	-	-	-	-	-	-	580	512	505	773	487
Nakhon Phanom	-	-	-	-	-	-	-	-	373	428	480	590	454
Surin	-	-	-	-	-	-	-	-	-	-	453	508	473
Buri Ram	-	-	-	-	-	-	-	-	-	529	677	560	-
<b>Central Plain</b>													
Saraburi	-	-	-	-	-	-	-	-	-	-	893	737	745
others	568	455	483	492	484	593	-	542	-	-	-	-	-

Source: Agricultural Statistics of Thailand 1984-2008

**Table AP.14** Garlic yield per *rai* of Thailand.

Yield per rai (kgs.)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Region/ Province
873	927	893	916	806	806	989	1,013	977	988	991	1030	Whole Kingdom
878	929	884	918	811	n/a	1,000	1,027	986	999	1,005	1,044	Northern
720	850	1,062	901	738	n/a	821	749	726	741	743	769	Northeastern
768	758	749	750	725	n/a	741	751	-	-	-	-	Central Plain
												Northern
859	892	860	852	773	n/a	966	993	943	961	984	1009	Chiang Rai
673	734	704	717	657	n/a	749	802	772	783	789	797	Phayao
636	731	718	719	672	n/a	813	828	797	805	817	796	Lampang
903	968	907	909	838	n/a	1,026	1,078	1,056	1,070	1,084	1,123	Lamphun
993	1,048	989	1,095	890	n/a	1,156	1,175	1,155	1,171	1,179	1,198	Chiang Mai
842	886	883	874	841	n/a	1,001	1,028	994	1,005	1,015	1,143	Mae Hong Son
786	850	844	846	831	n/a	955	1,007	983	987	986	1002	Tak
597	665	650	665	676	n/a	726	748	722	734	745	768	Phrae
791	653	669	675	686	n/a	623	664	643	652	659	667	Nan
-	-	-	-	-	-	-	-	-	-	-	-	Sukhothai
676	705	690	741	734	n/a	771	823	805	778	787	805	Uttaradit
645	680	688	686	864	n/a	757	887	841	853	848	875	Phetchabun
												Northeastern
783	850	893	770	722	n/a	835	745	717	735	723	820	Si Sa Ket
-	-	1,387	1,140	751	n/a	788	779	773	784	742	763	Chaiyaphum
-	-	1,277	1,197	791	n/a	795	734	701	723	790	722	Nakhon Ratchasima
-	-	-	-	-	-	-	-	-	-	736	717	Nakhon Phanom
489	-	-	-	-	-	-	-	-	-	-	-	Surin
-	-	-	-	-	-	-	-	-	-	-	-	Buri Ram
												Central Plain
768	758	749	750	725	n/a	741	751	-	-	-	-	Saraburi
-	-	-	-	-	-	-	-	-	-	-	-	others

Source: Agricultural Statistics of Thailand 1984-2008

Table AP.14 Garlic yield per rai of Thailand (cont).

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2001-2004 M.A. in Sustainable Development  
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### **Working Experience**

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