

Supplementary Materials: Potential Impact on Freshwater Resources from Agrofuels Feedstock Cultivation in Thailand: Implications of the Alternative Energy Development Plan 2015

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Table S1. Potential of palm oil for biodiesel production (2015–2036).

Potential of palm oil	2015 ¹	2017 ¹	2019 ¹	2026 ¹	2036 ²
Target of plantation (Mha)	0.72	0.80	0.88	1.20	1.63
Production of oil palm (M.tonne/year)	14.34	15.40	16.66	21.40	29.46
Production of palm oil (M.tonne/year)	2.58	2.93	3.17	4.28	5.89
Remainder of CPO (M.tonne/year) ³	1.56	1.85	2.03	2.93	4.24
Max. capacity of biodiesel production (ML/day) ⁴	5.60	6.50	7.10	10.00	14.00

¹The strategy of oil palm and palm oil for 12 years (2014–2026)

²The suitable area for oil palm plantation recommended by MOAC

³CPO is crude palm oil and an export of CPO is not taken into account.

⁴Biodiesel production is based on fatty acid methyl esters (FAME)

Table S2. Potential of cassava and sugarcane (molasses) for bioethanol production (2015–2026).

Potential of cassava	2015	2017	2019	2026	2036 ¹
Target of plantation (M.ha)	1.36	1.36	1.36	1.36	
Production of cassava (Mtonne/year)	30.60	36.00	42.50	59.50	
Cassava for domestic consumption (Mtonne/year)	8.05	8.91	9.77	11.57	
Remainder for ethanol production (Mtonne/year)	2.00	2.42	2.93	5.71	14.8
Bioethanol production from cassava (ML/day)	0.87	1.06	1.28	2.50	6.5
Potential of sugarcane (molasses)	2014	2017	2019	2026	
Target of plantation (Mha)	1.60	-	-	2.56	
Production of sugarcane (Mtonne/year)	112.00	135.00	152.00	182.00	
Molasses for domestic consumption (Mtonne/year)	1.01	1.02	1.05	1.13	
Remainder for ethanol production (Mtonne/year)	4.03	5.00	5.79	7.43	
Bioethanol production from molasses (ML/day)	2.65	3.29	3.81	4.88	
Total bioethanol production (ML/day)	3.52	4.35	5.09	7.38	11.3

¹Bioethanol production from 2026 to 2036 is considered mainly based on cassava by supposing the use of remainder for ethanol production increases by 10% every year since 2027. Then the production of bioethanol will reach the target at 11.3 ML/day by 2036.

Table S3. Number of recommended provinces for economic crop plantations by MOAC.

Crop	North	North-East	Center	East	South	Total
Oil palm	-	-	5	7	14	26
Para rubber	14	18	7	7	14	60
Cassava	14	20	9	6	-	59
Sugarcane	11	20	11	6	-	48
Pineapple	5	3	4	3	1	16
Maize	17	12	8	6	-	43

Table S4. Crop coefficient (K_c).

Crop	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Oil palm ¹	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Oil palm ²	1	1	1	1	1	1	1	1	1	1	1	1
Rubber ¹	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Rubber ²	1	1	1	1	1	1	1	1	1	1	1	1
Cassava	0.28	0.29	0.32	0.34	0.50	0.72	0.99	1.13	1.01	0.79	0.58	0.42
Sugarcane	0.65	0.86	1.13	1.35	1.56	1.29	1.20	0.93	0.63	0.52	-	-
Pineapple	0.5	0.5	0.5	0.50	0.50	0.50	0.50	0.50	0.30	0.30	0.30	0.30
Maize ³	0.84	1.53	1.40	0.79	-	-	-	-	-	-	-	-

¹Young oil palm (0–5 years) and rubber (0–7 years)

²Mature oil palm (6–25 years) and rubber (8–30 years)

³K_c values are averaged from weekly data

Table S5. Water scarcity footprint results of sugarcane plantation in the north, north-east, east and center (by province) based on watershed boundary.

North Province	Range of monthly irrigation water requirement (m ³ /ha)	Water scarcity footprint with regard to plantation area (m ³ H ₂ O _{eq} /ha)													
		Khong	Kok	Ping	Wang	Nan	Yom	Mae Klong	Sakae Krang	Salawin	Chao Phraya	Chi	Pasak	Salawin	Thachin
Lampang	146–2044	2662	2894	670	1930	-	6920	-	-	-	-	-	-	-	-
Phrae	321–1917	-	-	-	1813	1189	6610	-	-	-	-	-	-	-	-
Uttaradit	285–2056	-	-	-	-	1283	6962	-	-	-	-	-	-	-	-
Tak	275–2037	-	-	719	2089	-	7509	561	3868	2261	-	-	-	-	-
Phitsanulok	293–2143	2815	-	-	-	1356	7292	-	-	-	-	-	-	-	-
Phetchabun	435–1780	2587	-	-	-	1200	-	-	-	-	10,569	1740	3616	-	-
Kamphaeng Phet	406–1689	-	-	659	-	1210	6820	514	3529	-	10,523	-	-	2069	-
Sukhothai	375–1975	-	-	695	-	1282	6971	-	-	-	-	-	-	-	-
Phichit	470–1879	-	-	-	-	1202	6598	-	-	-	10,420	-	-	-	-
Nakhon Sawan	34–2305	-	-	814	-	1499	8168	637	4257	-	12,772	-	-	-	-
Uthai Thani	50–1530	-	-	-	-	-	-	446	2733	-	7511	-	-	-	6160

North-East Province	Range of monthly irrigation water requirement (m ³ /ha)	Water scarcity footprint with regard to plantation area (m ³ H ₂ O _{eq} /ha)								
		Khong	Chi	Nan	Pasak	Mun	Pasak	Bang Pakong	Prachin Buri	Tonle Sap
Nong Khai	692–1638	2522	-	-	-	-	-	-	-	-
Loei	22–1699	2641	1757	1161	3858	-	-	-	-	-
Udon Thani	39–1790	2836	1893	-	-	-	-	-	-	-
Nong Bua Lam Phu	78–1632	2541	1702	-	-	-	-	-	-	-
Sakon Nakhon	13–1596	2536	1691	-	-	-	-	-	-	-
Nakhon Phanom	787–1647	2490	-	-	-	-	-	-	-	-
Khon Kaen	130–1740	2727	1812	-	-	2299	-	-	-	-
Mukdahan	20–1720	2709	1810	-	-	2297	-	-	-	-
Maha Sarakham	29–1848	1910	-	-	-	2429	-	-	-	-
Kalasin	54–2198	3396	2258	-	-	-	-	-	-	-
Chaiyaphum	21–1839	-	1884	-	-	2395	4099	-	-	-
Roi Et	911–1891	2951	1957	-	-	2491	-	-	-	-
Ubon Ratchathani	926–1885	2935	1937	-	-	2468	-	-	-	-
Si Sa Ket	839–1703	-	1794	-	-	2274	-	-	-	-
Nakhon Ratchasima	32–1885	-	1878	-	-	2406	4237	8466	4268	-
Surin	848–1928	-	-	-	-	2382	-	-	-	-
Buri Ram	787–1956	-	-	-	-	2560	-	-	4478	2469
Bueng Kan	457–1389	1760	-	-	-	-	-	-	-	-
Yasothon	567–1122	1805	1170	-	-	1485	-	-	-	-

North-East Province	Range of monthly irrigation water requirement (m ³ /ha)	Water scarcity footprint with regard to plantation area (m ³ H ₂ O _{eq} /ha)								
		Khong	Chi	Nan	Pasak	Mun	Pasak	Bang Pakong	Prachin Buri	Tonle Sap
Amnat Charoen	809–2037	3285	-	-	-	2796	-	-	-	-

Center Province	Range of monthly irrigation water requirement (m ³ /ha)	Water scarcity footprint with regard to plantation area (m ³ H ₂ O _{eq} /ha)									
		Chao Phraya	Sakae Krang	Thachin	Mae Klong	Phetchaburi	Chi	Pasak	West Coast Gulf	Peninsula East Coast	Bang Pakong
Chai Nat	296–1852	10,841	3703	9136	-	-	-	-	-	-	-
Ratchaburi	221–2338	-	-	11,297	661	4017	-	-	-	-	-
Suphan Buri	306–2036	11,918	-	10,114	612	-	-	-	-	-	-
Lop Buri	66–2115	12,682	-	-	-	-	2074	4366	-	-	-
Kanchanaburi	163–1724	-	-	9270	502	-	-	-	-	-	-
Phetchaburi	281–1939	-	-	-	598	3512	-	-	3983	-	-
Prachuap Khiri Khan	237–1804	-	-	-	-	3592	-	-	4006	3609	-
Nakhon Pathom	202–2155	-	-	10,301	611	-	-	-	-	-	-
Saraburi	25–1737	8994	-	-	-	-	-	3084	-	-	5949
Ang Thong	25–2340	13,526	-	11,349	-	-	-	-	-	-	-
Sing Buri	174–1733	9592	-	-	-	-	-	-	-	-	-

East Province	Range of monthly irrigation water requirement (m ³ /ha)	Water scarcity footprint with regard to plantation area (m ³ H ₂ O _{eq} /ha)					
		East Coast Gulf	Bang Pakong	Chao Phraya	Prachin Buri	Mun	Tonle Sap
Chachoengsao	184–1329	2664	6784	9725	3430	-	-
Prachin Buri	133–1648	-	7458	-	3755	2152	-
Sa Kaeo	347–1961	3500	8026	-	4107	2353	2317
Chon Buri	180–1839	3636	8135	-	-	-	-
Rayong	143–1510	2821	-	-	-	-	-
Chanthaburi	385–1268	2463	6109	-	3059	-	1617

Table S6. Water scarcity footprint results of cassava plantation in the North, North-East, East and Center regions (by province) based on watershed boundary.

North Province	Range of monthly irrigation water requirement (m ³ /ha)	Water scarcity footprint with regard to plantation area by provinces (m ³ H ₂ O _{eq} /ha)													
		Khong	Kok	Ping	Wang	Nan	Yom	Mae Klong	Sakae Krang	Salawin	Chao Phraya	Chi	Pasak	Salawin	Thachin
Lampang	40–333	430	471	113	329	-	1076	-	-	-	-	-	-	-	-
Phrae	135–300	-	-	-	326	184	1108	-	-	-	-	-	-	-	-
Uttaradit	105–454	-	-	-	-	193	1065	-	-	-	-	-	-	-	-
Tak	151–410	-	-	122	390	-	1383	79	731	444	-	-	-	-	-
Phitsanulok	184–284	395	-	-	-	166	1116	-	-	-	-	-	-	-	-
Phetchabun	4–472	395	-	-	-	147	-	-	-	-	1729	252	576	-	-
Kamphaeng Phet	17–355	-	-	104	-	152	1051	66	639	-	1862	-	-	351	-
Sukhothai	129–471	-	-	130	-	205	1213	-	-	-	-	-	-	-	-
Phichit	119–492	-	-	-	-	164	870	-	-	-	1757	-	-	-	-
Nakhon Sawan	66–462	-	-	134	-	205	1234	85	731	-	2305	-	-	-	-
Uthai Thani	64–751	-	-	-	-	-	-	131	762	-	1216	-	-	-	897

North-East Province	Range of monthly irrigation water requirement (m³/ha)	Water scarcity footprint with regard to plantation area by provinces (m³H₂Oeq/ha)								
		Khong	Chi	Nan	Pasak	Mun	Pasak	Bang Pakong	Prachin Buri	Tonle Sap
Nong Khai	104–405	321	-	-	-	-	-	-	-	-
Loei	88–495	354	243	151	519	-	-	-	-	-
Udon Thani	117–522	389	244	-	-	-	-	-	-	-
Nong Bua Lam Phu	94–442	271	169	-	-	-	-	-	-	-
Sakon Nakhon	18–404	249	157	-	-	-	-	-	-	-
Nakhon Phanom	60–475	281	-	-	-	-	-	-	-	-
Khon Kaen	100–456	371	231	-	-	286	-	-	-	-
Mukdahan	62–582	450	287	-	-	351	-	-	-	-
Maha Sarakham	110–483	246	-	-	-	306	-	-	-	-
Kalasin	159–612	539	339	-	-	-	-	-	-	-
Chaiyaphum	107–528	-	319	-	-	377	534	-	-	-
Roi Et	82–573	417	255	-	-	320	-	-	-	-
Ubon Ratchathani	64–585	510	316	-	-	395	-	-	-	-
Si Sa Ket	88–510	-	229	-	-	281	-	-	-	-
Nakhon Ratchasima	55–524	-	424	-	-	513	720	1622	686	-
Surin	23–518	-	-	-	-	306	-	-	-	-
Buri Ram	30–438	-	-	-	-	321	-	-	605	332
Bueng Kan	80–1064	548	-	-	-	-	-	-	-	-

North-East Province	Range of monthly irrigation water requirement (m ³ /ha)	Water scarcity footprint with regard to plantation area by provinces (m ³ H ₂ O _{eq} /ha)								
		Khong	Chi	Nan	Pasak	Mun	Pasak	Bang Pakong	Prachin Buri	Tonle Sap
Yasothon	140–1167	524	572	-	-	659	-	-	-	-
Amnat Charoen	182–584	519	-	-	-	415	-	-	-	-

Center Province	Range of monthly irrigation water requirement (m ³ /ha)	Water scarcity footprint with regard to plantation area by provinces (m ³ H ₂ O _{eq} /ha)									
		Chao Phraya	Sakae Krang	Thachin	Mae Klong	Phetchaburi	Chi	Pasak	West Coast Gulf	Peninsula East Coast	Bang Pakong
Chai Nat	27–379	2537	963	2001	-	-	-	-	-	-	-
Ratchaburi	146–424	-	-	2552	158	800	-	-	-	-	-
Suphan Buri	57–466	2957	-	2430	153	-	-	-	-	-	-
Lop Buri	131–450	2701	-	-	-	-	422	905	-	-	-
Kanchanaburi	157–370	-	-	1399	54	-	-	-	-	-	-
Phetchaburi	46–505	-	-	-	139	641	-	-	689	-	-
Prachuap Khiri Khan	16–512	-	-	-	-	701	-	-	732	588	-
Nakhon Pathom	149–392	-	-	2055	133	-	-	-	-	-	-
Saraburi	130–764	1751	-	-	-	-	-	623	-	-	1341
Ang Thong	34–814	4178	-	3330	-	-	-	-	-	-	-
Sing Buri	233–1151	2609	-	-	-	-	-	-	-	-	-

East Province	Range of monthly irrigation water requirement (m ³ /ha)	Water scarcity footprint with regard to plantation area by provinces (m ³ H ₂ O _{eq} /ha)					
		East Coast Gulf	Bang Pakong	Chao Phraya	Prachin Buri	Mun	Tonle Sap
Chachoengsao	37–457	408	1550	1790	668	-	-
Prachin Buri	131–521	-	1596	-	646	303	-
Sa Kaeo	57–491	544	1813	-	785	346	379
Chon Buri	173–530	569	1891	-	-	-	-
Rayong	124–435	349	-	-	-	-	-
Chanthaburi	90–376	278	935	-	352	-	192

Table S7. Water scarcity footprint results of maize plantation in the North, North-East, East and Center (by province) based on watershed boundary.

North Province	Range of monthly irrigation water requirement (m ³ /ha)	Water scarcity footprint with regard to plantation area by provinces (m ³ H ₂ O _{eq} /ha)													
		Khong	Kok	Ping	Wang	Nan	Yom	Mae Klong	Sakae Krang	Salawin	Chao Phraya	Chi	Pasak	Salawin	Thachin
Lampang	585–702	400	293	184	292	-	387	-	-	-	-	-	-	-	-
Phrae	351–909	-	-	-	248	201	310	-	-	-	-	-	-	-	-
Uttaradit	50–735	-	-	-	-	183	294	-	-	-	-	-	-	-	-
Tak	60–722	-	-	154	267	-	316	122	401	238	-	-	-	-	-
Phitsanulok	360–1124	451	-	-	-	272	427	-	-	-	-	-	-	-	-
Phetchabun	394–851	334	-	-	-	205	-	-	-	-	547	310	307	-	-
Kamphaeng Phet	319–858	-	-	182	-	231	366	146	461	-	620	-	-	261	-
Sukhothai	455–801	-	-	188	-	242	385	-	-	-	-	-	-	-	-
Phichit	439–881	-	-	-	-	213	330	-	-	-	570	-	-	-	-
Nakhon Sawan	610–1116	-	-	236	-	302	474	192	593	-	820	-	-	-	-
Uthai Thani	473–1274	-	-	-	-	-	-	172	500	-	676	-	-	-	548

North-East Province	Range of monthly irrigation water requirement (m ³ /ha)	Water scarcity footprint with regard to plantation area by provinces (m ³ H ₂ O _{eq} /ha)								
		Khong	Chi	Nan	Pasak	Mun	Pasak	Bang Pakong	Prachin Buri	Tonle Sap
Nong Khai	454–474	208	-	-	-	-	-	-	-	-
Loei	459–861	352	343	221	322	-	-	-	-	-
Udon Thani	450–926	419	383	-	-	-	-	-	-	-
Nong Bua Lam Phu	567–1084	432	406	-	-	-	-	-	-	-
Sakon Nakhon	489–656	343	323	-	-	-	-	-	-	-
Nakhon Phanom	451–558	215	-	-	-	-	-	-	-	-
Khon Kaen	455–998	398	399	-	-	468	-	-	-	-
Mukdahan	296–888	427	369	-	-	421	-	-	-	-
Maha Sarakham	635–928	457	-	-	-	536	-	-	-	-
Kalasin	484–1059	460	420	-	-	-	-	-	-	-
Chaiyaphum	590–1158	-	489	-	-	573	447	-	-	-
Roi Et	462–765	381	352	-	-	405	-	-	-	-
Ubon Ratchathani	308–709	301	274	-	-	313	-	-	-	-
Si Sa Ket	511–788	-	387	-	-	458	-	-	-	-
Nakhon Ratchasima	382–1022	-	419	-	-	500	358	556	343	-
Surin	460–670	-	-	-	-	358	-	-	-	-
Buri Ram	632–868	-	-	-	-	512	-	-	391	403
Bueng Kan	207–532	87	-	-	-	-	-	-	-	-
Yasothon	296–724	122	134	-	-	153	-	-	-	-

North-East	Range of monthly irrigation water requirement (m³/ha)	Water scarcity footprint with regard to plantation area by provinces (m³H₂Oeq/ha)								
Province		Khong	Chi	Nan	Pasak	Mun	Pasak	Bang Pakong	Prachin Buri	Tonle Sap
Amnat Charoen	306–1762	610	-	-	-	591	-	-	-	-

Center	Range of monthly irrigation water requirement (m ³ /ha)	Water scarcity footprint with regard to plantation area by provinces (m ³ H ₂ O _{eq} /ha)									
Province		Chao Phraya	Sakae Krang	Thachin	Mae Klong	Phetchaburi	Chi	Pasak	West Coast Gulf	Peninsula East Coast	Bang Pakong
Chai Nat	787–1167	945	662	766	-	-	-	-	-	-	-
Ratchaburi	782–998	-	-	774	207	366	-	-	-	-	-
Suphan Buri	849–1088	954	-	770	214	-	-	-	-	-	-
Lop Buri	582–1001	689	-	-	-	-	391	376	-	-	-
Kanchanaburi	278–569	-	-	387	111	-	-	-	-	-	-
Phetchaburi	811–1192	-	-	-	219	369	-	-	658	-	-
Prachuap Khiri Khan	733–957	-	-	-	-	337	-	-	598	901	-
Nakhon Pathom	769–909	-	-	732	197	-	-	-	-	-	-
Saraburi	526–1208	690	-	-	-	-	-	380	-	-	568
Ang Thong	103–1595	1,337	-	1,078	-	-	-	-	-	-	-
Sing Buri	15–1534	716	-	-	-	-	-	-	-	-	-

East	Range of monthly irrigation water requirement (m ³ /ha)	Water scarcity footprint with regard to plantation area by provinces (m ³ H ₂ O _{eq} /ha)					
Province		East Coast Gulf	Bang Pakong	Chao Phraya	Prachin Buri	Mun	Tonle Sap
Chachoengsao	50–576	127	213	276	130	-	-
Prachin Buri	136–537	-	282	-	185	206	-
Sa Kaeo	432–756	351	444	-	282	365	291
Chon Buri	610–1080	498	634	-	-	-	-
Rayong	345–558	277	-	-	-	-	-

Table S8. Water scarcity footprint results of pineapple plantation in in the North, North-East, East and Center (by province) based on watershed boundary.

North Province	Range of monthly irrigation water requirement (m³/ha)	Water scarcity footprint with regard to plantation area by provinces (m³H₂O _{eq} /ha)													
		Khong	Kok	Ping	Wang	Nan	Yom	Mae Klong	Sakae Krang	Salawin	Chao Phraya	Chi	Pasak	Salawin	Thachin
Lampang	34–472	629	740	134	451	-	1924	-	-	-	-	-	-	-	-
Phrae	136–518	-	-	-	400	252	1872	-	-	-	-	-	-	-	-
Uttaradit	141–488	-	-	-	-	309	1947	-	-	-	-	-	-	-	-
Tak	116–558	-	-	164	551	-	2320	128	1,089	622	-	-	-	-	-
Phitsanulok	66–507	684	-	-	-	316	2083	-	-	-	-	-	-	-	-
Phetchabun	25–419	546	-	-	-	222	-	-	-	-	2558	357	901	-	-
Kamphaeng Phet	55–505	-	-	130	-	257	1908	102	898	-	2752	-	-	504	-
Sukhothai	61–526	-	-	150	-	304	2042	-	-	-	-	-	-	-	-
Phichit	47–449	-	-	-	-	259	1698	-	-	-	2640	-	-	-	-
Nakhon Sawan	132–508	-	-	180	-	351	2290	139	1,123	-	3481	-	-	-	-
Uthai Thani	46–137	-	-	-	-	-	-	18	145	-	294	-	-	-	226

North-East Province	Range of monthly irrigation water requirement (m³/ha)	Water scarcity footprint with regard to plantation area by provinces (m³H₂O _{eq} /ha)								
		Khong	Chi	Nan	Pasak	Mun	Pasak	Bang Pakong	Prachin Buri	Tonle Sap
Nong Khai	15–376	471	-	-	-	-	-	-	-	-
Loei	13–409	513	346	229	852	-	-	-	-	-
Udon Thani	32–422	613	418	-	-	-	-	-	-	-
Nong Bua Lam Phu	8–319	403	275	-	-	-	-	-	-	-
Sakon Nakhon	27–400	386	266	-	-	-	-	-	-	-
Nakhon Phanom	30–400	376	-	-	-	-	-	-	-	-
Khon Kaen	49–417	532	359	-	-	455	-	-	-	-
Mukdahan	61–435	689	474	-	-	591	-	-	-	-
Maha Sarakham	65–434	400	-	-	-	508	-	-	-	-
Kalasin	114–549	791	536	-	-	-	-	-	-	-
Chaiyaphum	59–396	-	331	-	-	429	807	-	-	-
Roi Et	77–453	633	426	-	-	540	-	-	-	-
Ubon Ratchathani	38–500	686	458	-	-	581	-	-	-	-
Si Sa Ket	34–499	-	370	-	-	463	-	-	-	-
Nakhon Ratchasima	84–466	-	372	-	-	480	949	1819	951	-
Surin	29–493	-	-	-	-	494	-	-	-	-
Buri Ram	77–479	-	-	-	-	531	-	-	1,017	482
Bueng Kan	46–448	299	-	-	-	-	-	-	-	-

North-East Province	Range of monthly irrigation water requirement (m ³ /ha)	Water scarcity footprint with regard to plantation area by provinces (m ³ H ₂ O _{eq} /ha)								
		Khong	Chi	Nan	Pasak	Mun	Pasak	Bang Pakong	Prachin Buri	Tonle Sap
Yasothon	61–403	201	177	-	-	217	-	-	-	-
Amnat Charoen	108–549	744	-	-	-	655	-	-	-	-

Center Province	Range of monthly irrigation water requirement (m ³ /ha)	Water scarcity footprint with regard to plantation area by provinces (m ³ H ₂ O _{eq} /ha)									
		Chao Phraya	Sakae Krang	Tha chin	Mae Klong	Phetcha buri	Chi	Pasak	West Coast Gulf	Peninsula East Coast	Bang Pakong
Chai Nat	55–512	3060	1034	2670	-	-	-	-	-	-	-
Ratchaburi	4–626	-	-	3486	174	1191	-	-	-	-	-
Suphan Buri	164–576	3496	-	3098	145	-	-	-	-	-	-
Lop Buri	73–604	3522	-	-	-	-	501	1261	-	-	-
Kanchanaburi	26–546	-	-	2313	78	-	-	-	-	-	-
Phetchaburi	30–592	-	-	-	120	887	-	-	872	-	-
Prachuap Khiri Khan	198–603	-	-	-	-	974	-	-	928	835	-
Nakhon Pathom	138–574	-	-	2878	140	-	-	-	-	-	-
Saraburi	4–242	496	-	-	-	-	-	189	-	-	402
Ang Thong	21–645	4163	-	3574	-	-	-	-	-	-	-
Sing Buri	7–354	1325	-	-	-	-	-	-	-	-	-

East Province	Range of monthly irrigation water requirement (m ³ /ha)	Water scarcity footprint with regard to plantation area by provinces (m ³ H ₂ O _{eq} /ha)					
		East Coast Gulf	Bang Pakong	Chao Phraya	Prachin Buri	Mun	Tonle Sap
Chachoengsao	38–597	454	1867	2283	928	-	-
Prachin Buri	123–454	-	2034	-	988	472	-
Sa Kaeo	153–608	747	2351	-	1175	544	502
Chon Buri	91–469	712	2036	-	-	-	-
Rayong	90–373	330	-	-	-	-	-
Chanthaburi	191–352	293	1177	-	579	-	197