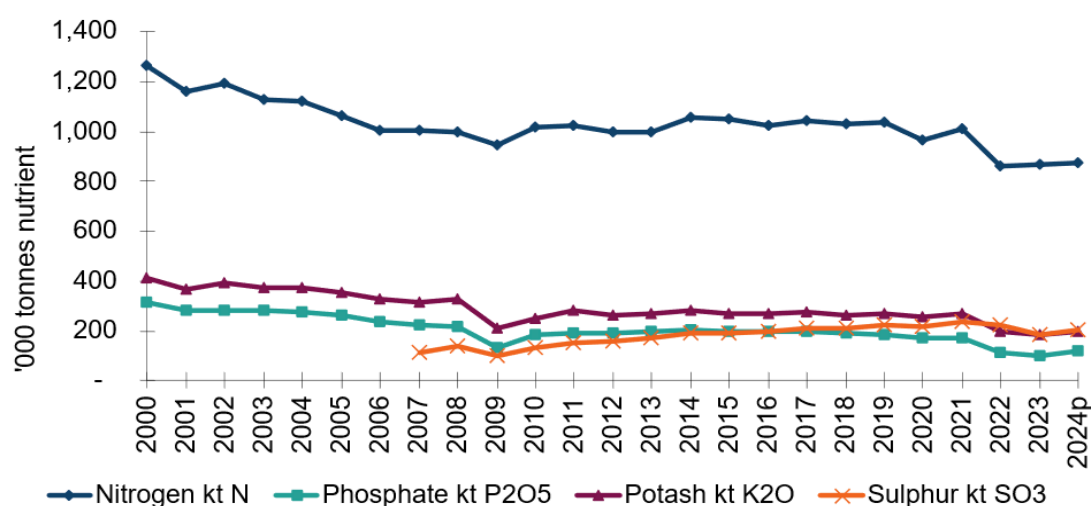


A2.4 TOTAL QUANTITIES OF NITROGEN, PHOSPHATE, POTASH AND SULPHUR USED IN THE UK

Estimates of quantities of nitrogen, phosphate, potash and sulphur used in the UK since 2003 are illustrated in Figure A2.7. Longer term data from 1966 is attached. These data are based on BSFP findings and trade and sales data. They are compiled by the AIC in conjunction with Defra using the methodology described in Appendix 3.2.5. Users should note that these figures relate also to the whole of the UK, whereas the other figures presented in this report relate just to Great Britain.

Total nitrogen use in the UK increased from 590 thousand tonnes in 1966 up to 1,674 thousand tonnes in 1987 before declining gradually to 1,001 thousand tonnes in 2008. The drop in 2009 was related to high fertiliser prices. Between 2010 and 2019 nitrogen use has remained relatively stable. The reduction in nitrogen use observed in 2020 was related to weather and cropping factors. From the peak in 1987, UK nitrogen use since has fallen by approximately 40%. Estimated nitrogen use in 2024 increased slightly on the previous year, to 872 thousand tonnes. 2022 was the lowest level seen since 1970, driven predominantly by supply shortage and price increases, in part as a result of the conflict in Ukraine.

Figure A2.7 Quantities of major nutrients used, United Kingdom 2000 – 2024



Phosphate use in the UK has fallen since the mid-1980s but since 2007 this decline has slowed. The low use of 129 thousand tonnes in 2009 was price related. Between 2010 and 2019 total phosphate use was more stable, between 184 and 201 thousand tonnes. Results for 2020 and 2021 showed a further reduction of this nutrient, (174 thousand tonnes of phosphate was used in 2020). At this level of usage volumes are only 40% of the annual average used between 1966 and 1995. This reduction somewhat reversed in 2024, increasing 14 thousand tonnes on the year, to 116 thousand tonnes. A softening of pricing and supply challenges from the year earlier helped to drive this recovery.

Potash use in the UK was highest in the mid-1980s through to 1999, after which there has been a sustained decline. Potash use in 2022 recorded a steeper decline, following a decade of reasonable stability. This reduced further in 2023 to 184 thousand tonnes. During 2024, potash use recovered to 2022 levels, to 198 thousand tonnes. As with phosphate, an easing in global price increases and reduction in supply issues were key drivers of this recovery.

Between 2009 and 2021, sulphur use recorded a steady increase, reaching highs of 239 thousand tonnes in 2021. This growth was reversed in the subsequent two years, with usage levels of 182 thousand tonnes reported in 2023, the lowest usage volume since 2014. Sulphur use in 2024 has reversed this downward trend, with usage volumes of 205 thousand tonnes. However, this is still the second lowest volume in the last eight years.

Crop year	Mineral fertiliser nutrients																Mineral fertiliser product					
	Nitrogen kt N				Phosphate kt P ₂ O ₅				Potash kt K ₂ O				Sulphur kt SO ₃				Nitrogen (N & NS)			Compounds, Blends		
	England & Wales	Scotland	N Ireland	UK	England & Wales	Scotland	N Ireland	UK	England & Wales	Scotland	N Ireland	UK	England & Wales	Scotland	N Ireland	UK	Great Britain	Northern Ireland	UK	Great Britain	Northern Ireland	UK
1966	491	76	23	590	332	81	22	435	335	61	18	413	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1967	573	85	27	685	359	79	23	460	354	61	19	434	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1968	625	93	29	748	367	81	21	469	362	62	18	441	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1969	639	108	35	781	362	84	22	467	363	65	19	447	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1970	653	108	34	796	366	81	23	470	356	63	20	438	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1971	732	119	43	894	397	84	24	504	373	65	21	459	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1972	751	120	48	919	371	76	24	470	336	60	19	416	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1973	759	132	56	947	373	85	25	482	333	63	21	417	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1974	784	139	57	980	357	72	21	449	347	55	19	421	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1975	788	143	54	984	306	69	18	393	302	59	16	377	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1976	851	144	65	1,059	315	69	19	404	322	59	17	398	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1977	879	146	68	1,093	316	69	21	406	330	59	20	409	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1978	924	156	75	1,155	316	72	22	410	328	64	20	412	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1979	941	160	85	1,186	321	73	22	416	333	65	21	419	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1980	1,031	156	81	1,268	342	75	24	440	361	65	22	447	[x]	[x]	[x]	[x]	[x]	[x]	1,986	[x]	[x]	[x]
1981	1,100	159	76	1,335	344	73	24	441	367	66	21	454	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1982	1,180	160	76	1,416	357	65	24	446	394	67	22	483	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1983	1,227	161	82	1,470	359	65	24	448	409	68	23	500	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1984	1,316	183	89	1,588	391	69	28	488	457	73	29	559	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1985	1,298	186	96	1,580	375	71	23	469	441	72	28	541	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1986	1,297	176	99	1,572	341	65	28	434	415	66	29	510	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1987	1,370	193	111	1,674	340	65	27	432	429	70	29	528	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1988	1,251	180	94	1,525	341	70	24	435	419	76	29	524	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1989	1,223	193	98	1,514	334	65	26	425	420	74	29	523	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1990	1,275	194	113	1,582	323	63	28	414	409	73	33	515	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1991	1,224	193	98	1,515	321	61	24	406	393	71	28	492	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1992	1,105	166	94	1,365	295	55	21	371	351	64	26	441	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1993	968	142	109	1,219	286	50	24	360	344	57	29	430	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1994	986	133	129	1,248	312	51	28	391	361	59	38	458	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1995	1,064	156	128	1,348	325	53	27	405	378	64	34	476	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1996	1,048	157	128	1,333	302	62	30	394	370	65	36	471	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1997	1,156	172	112	1,440	325	63	24	412	405	65	31	501	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1998	1,111	158	106	1,375	308	56	19	383	397	64	26	487	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
1999	1,015	152	117	1,284	274	50	23	347	365	59	27	451	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]	[x]
2000	1,005	150	113	1,268	237	59	21	317	322	61	26	409	[x]	[x]	[x]	[x]	2,294	135	2,429	2,519	329	2,848
2001	876	180	106	1,162	201	57	21	279	274	69	26	369	[x]	[x]	[x]	[x]	1,838	99	1,936	2,142	329	2,471
2002	915	187	95	1,197	209	55	19	283	297	70	24	391	58	8	[x]	[x]	2,250	85	2,335	2,211	300	2,511
2003	853	170	108	1,131	203	60	19	282	283	66	26	375	75	11	[x]	[x]	1,911	85	1,996	2,171	335	2,506
2004	875	150	100	1,125	205	57	16	278	288	65	22	375	95	14	[x]	[x]	1,939	91	2,030	2,254	296	2,550
2005	834	150	77	1,061	192	55	12	259	267	67	18	352	94	13	[x]	[x]	2,067	75	2,142	1,999	222	2,221
2006	780	153	70	1,003	173	51	11	235	243	66	16	325	88	13	[x]	[x]	1,885	75	1,959	1,932	202	2,134
2007	802	126	80	1,008	169	46	9	224	241	59	17	317	94	13	6	114	1,924	108	2,032	1,833	207	2,039
2008	800	127	74	1,001	160	49	6	215	244	68	13	325	114	16	6	136	2,197	130	2,326	1,675	153	1,827
2009	767	124	57	948	91	34	4	129	148	52	8	208	82	12	7	101	2,050	113	2,163	1,013	103	1,116
2010	813	127	76	1,016	134	44	6	184	182	57	12	251	107	15	7	129	2,220	134	2,355	1,384	145	1,529
2011	824	124	74	1,022	145	42	5	192	213	59	11	283	124	18	8	150	2,293	143	2,436	1,446	137	1,583
2012	809	125	66	1,000	140	43	5	188	193	56	10	259	130	19	8	156	2,271	112	2,383	1,352	132	1,483
2013	781	139	79	999	141	46	7	194	194	60	13	267	142	20	10	172	2,160	118	2,277	1,410	185	1,594
2014	838	151	71	1,060	146	48	7	201	206	65	13	284	160	23	9	192	2,449	117	2,566	1,482	166	1,647
2015	819	155	75	1,049	142	48	6	196	196	64	12	272	157	22	14	193	2,469	108	2,577	1,348	157	1,505
2016	801	155	71	1,026	139	51	7	197	188	69	13	270	162	23	9	194	2,378	121	2,499	1,349	155	1,504
2017	806	157	78	1,041	133	54	8	195	185	77	14	276	175	25	11	211	2,450	133	2,583	1,361	171	1,532
2018	804	147	82	1,033	131	48	9	188	174	72	16	262	176	25	12	210	2,446	126	2,571	1,296	192	1,488
2019	810	150	79	1,038	132	46	7	186	182	68	14	264	183	25	14	220	2,505	130	2,635	1,301	172	1,473
2020	757	131	79	967	127	39	8	174	177	63	14	254	177	29	14	219	2,276	120	2,396	1,328	177	1,505
2021	797	135	82	1,014	118	45	8	171	180	69	17	266	194	29	17	239	2,406	131	2,536	1,389	181	1,570
2022	687	118	57	862	73	32	5	110	131	55	11	197	190	26	12	226	2,243	102	2,345	939	110	1,049
2023	692	114	65	871	67	29	6	102	122	51	11	184	148	23	12	182	2,174	123	2,297	818	115	933
2024[p]	690	112	70	872	73	36	7	116	126	60	12	198	170	21	14	205	2,138	129	2,267	892	129	1,021

Note: Years are crop rather than calendar years (e.g. 2024 refers to the 2032-24 crop years, fertiliser consumption period July to June). Data for 2024[p] are provisional.

Cells where data are not available are represented by '[x]'