## from British Survey of Fertiliser Practice 2023

Figure A2.7

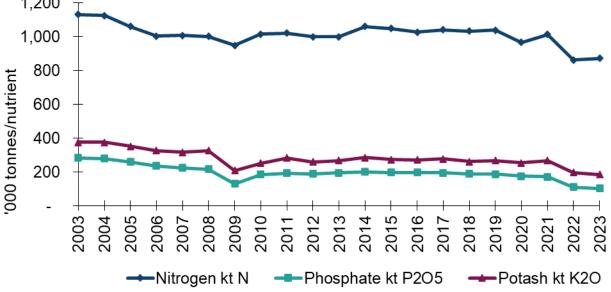
https://www.gov.uk/government/collections/fertiliser-usage

## A2.4 TOTAL QUANTITIES OF NITROGEN, PHOSPHATE AND POTASH USED IN THE UK, FROM 1966

Estimates of quantities of nitrogen, phosphate and potash used in the UK since 2003 are illustrated in Figure A2.7. Longer term data, since 1966, can be located in Appendix table AA1.7. 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 2023 increased slightly on the previous year, to 871 thousand tonnes. 2022 was the lowest level seen since 1970, driven predominantly by supply shortage and price increases as a result of the conflict in Ukraine. This further exacerbated supply challenges that had resulted from one of the UK's main fertiliser manufacturers closing a production site in September 2021 for a period.

1,200 \_\_\_\_



Quantities of major nutrients used, United Kingdom 2003 - 2023

Phosphate use in the UK has fallen since the mid-1980s but since 2007 this decline slowed. The low use of 129 thousand tonnes in 2009 was price related. Between 2010 and 2019 total phosphate use was more stable, between 184–201 thousand tonnes. Results for 2020 and 2021 appeared to show 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 further accelerated in 2023, to an estimated 102 thousand tonnes. Increased pricing and supply challenges helped drive this movement.

Potash use in the UK was highest in the mid-1980s through to 1999, after which there has been a more sustained decline. Potash use in 2022 recorded an increased decline, following a decade of reasonable stability. This reduced further in 2023 to 184 thousand tonnes. Global price increases and reduction in supply, largely driven by the war in Ukraine, were key drivers of this decrease.

Para		Nitrogen kt N				Phosphate kt P 2 O 5				Potash kt K <sub>2</sub> O			
1966	Harvest year	_	Scotland	N Ireland	UK	_	Scotland	N Ireland	UK	_	Scotland	N Ireland	UK
1967	1066		76	23	500		81	22	135		61	18	/113
1968													
1969													
1971													
1972	1970	653	108	34	796	366	81	23	470	356	63	20	438
1973	1971			43			84		504		65		459
1974   784   139   57   980   357   72   21   449   347   55   19   421     1975   788   143   54   984   306   69   18   393   302   59   16   377     1976   851   144   65   1,659   315   69   19   404   322   59   17   398     1977   879   146   68   1,093   316   69   21   406   330   59   20   409     1978   924   156   75   1,155   316   72   22   410   328   64   20   412     1979   941   160   85   1,186   321   73   22   416   333   65   21   419     1980   1,031   156   81   1,268   342   75   24   440   361   65   22   447     1981   1,100   159   76   1,335   344   73   24   441   367   66   21   454     1982   1,180   160   76   1,416   357   65   24   446   394   67   22   483     1983   1,227   161   82   1,470   359   65   24   448   409   68   23   500     1984   1,316   183   89   1,588   391   69   28   488   457   73   29   559     1985   1,298   186   96   1,580   375   71   23   469   441   72   28   541     1987   1,370   193   111   1,674   340   65   27   432   429   70   29   528     1988   1,251   180   94   1,525   341   70   24   435   419   76   29   524     1999   1,275   194   113   1,582   323   63   28   414   409   73   33   51     1991   1,224   193   98   1,515   321   61   24   406   333   71   28   492     1992   1,105   166   94   1,365   295   55   21   371   351   64   26   441     1993   986   133   129   1,248   312   51   28   391   361   59   38   458     1995   1,064   156   128   1,348   325   53   27   405   339   71   28   492     1992   1,105   166   94   1,365   295   55   21   371   351   64   26   441     1993   986   133   129   1,248   312   51   28   391   361   59   38   458     1995   1,064   156   172   112   1,440   325   63   24   412   405   65   31   501     1997   1,156   172   112   1,440   325   63   24   412   405   65   31   501     1998   1,015   152   117   1,284   274   50   23   347   365   59   27   435     2000   767   124   57   948   91   34   41   129   148   52   82     2010   873   137   76   1,001   1,001   160   46   9   224   2													
1975													
1976													
1977													
1978													
1979													
1980													
1981   1,100   159   76   1,335   344   73   24   441   367   66   21   454   1982   1,180   160   76   1,416   357   65   24   448   349   67   22   483   1983   1,227   161   82   1,470   359   65   24   448   449   68   23   500   1984   1,316   183   89   1,588   391   69   28   488   457   73   29   559   1985   1,298   186   96   1,580   375   71   23   469   441   72   28   541   1986   1,297   176   99   1,572   341   65   28   434   415   66   29   510   1987   1,370   193   111   1,674   340   65   27   432   429   70   29   528   1988   1,251   180   94   1,525   341   70   24   435   419   76   29   524   1989   1,223   193   98   1,514   334   65   26   425   420   74   29   523   1990   1,275   194   113   1,582   323   63   28   414   409   73   33   515   1991   1,224   193   98   1,515   321   61   24   406   393   71   28   492   1992   1,105   166   94   1,365   295   55   21   371   351   64   26   441   1993   968   142   109   1,219   286   50   24   360   344   57   29   430   1994   1986   133   129   1,248   312   51   28   391   361   59   38   458   1995   1,064   156   128   1,333   302   62   30   394   370   65   36   471   1997   1,156   172   112   1,440   325   63   24   412   405   65   31   501   1998   1,111   158   106   1,375   308   56   19   383   397   64   26   487   1998   1,015   152   117   1,284   274   50   23   347   365   59   27   451   2000   1,005   150   113   1,268   237   59   21   317   322   61   26   409   2001   876   180   106   1,162   201   57   21   279   274   69   26   369   2002   915   187   95   1,197   209   55   19   283   297   70   24   391   2003   833   170   108   1,131   203   60   19   282   283   66   22   375   2005   834   150   77   1,061   192   55   12   279   274   69   26   369   2002   915   187   95   1,197   209   55   19   283   297   70   24   391   2003   833   170   108   1,131   203   60   19   282   283   66   22   375   2005   834   150   77   1,061   192   55   12   279   274   69   26   369   2001   876   800   12													
1982   1,180   160   76   1,416   357   65   24   446   394   67   22   483   1983   1,227   161   82   1,470   359   65   24   448   409   68   23   500   1984   1,316   183   89   1,588   391   69   28   488   405   73   29   559   1985   1,298   186   96   1,580   375   71   23   469   441   72   28   541   1986   1,297   176   99   1,572   341   65   28   434   415   66   29   510   1987   1,370   193   111   1,674   340   65   27   432   429   70   29   528   1988   1,251   180   94   1,525   341   70   24   435   419   76   29   524   1989   1,223   193   98   1,514   334   65   26   425   420   74   29   523   1990   1,275   194   113   1,582   323   63   28   414   409   73   33   515   1991   1,224   193   98   1,515   321   61   24   406   393   71   28   492   1992   1,105   166   94   1,365   295   55   21   371   351   64   26   441   1993   968   142   109   1,219   286   50   24   360   344   57   29   430   1994   986   133   129   1,248   312   51   28   391   361   59   38   458   1995   1,064   156   128   1,348   325   53   27   405   376   64   34   476   1996   1,048   157   128   1,333   302   62   30   394   370   65   36   471   1997   1,156   172   112   1,440   325   63   24   412   405   65   31   501   1998   1,111   158   106   1,375   308   56   19   383   397   64   26   487   1999   1,015   152   117   1,284   274   50   23   347   365   59   27   451   2000   1,005   150   113   1,268   237   59   21   317   322   61   26   499   2001   876   180   106   1,162   201   57   21   279   274   69   26   369   2002   915   187   95   1,197   209   55   19   283   297   70   24   391   2003   853   170   108   1,131   203   60   19   282   283   66   22   375   2005   834   150   77   1,061   192   55   12   259   267   67   18   352   2006   800   127   74   1,001   160   49   6   215   244   68   13   325   2007   802   126   80   1,008   169   46   9   224   241   59   17   317   2008   800   127   74   1,001   160   49   6   215   244   68   13   325   2011   834   157   74   1													
1984         1,316         183         89         1,588         391         69         28         488         457         73         29         559           1985         1,298         186         96         1,580         375         71         23         469         441         72         28         541           1986         1,297         176         99         1,572         341         65         28         434         415         66         29         510           1987         1,370         193         111         1,674         340         65         27         432         429         70         29         528           1988         1,223         193         98         1,514         334         65         26         420         74         29         523           1990         1,275         194         113         1,582         323         63         28         414         409         73         33         515           1991         1,224         193         98         1,515         321         61         24         406         393         71         28         421 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>													
1985	1983	1,227	161	82	1,470	359	65	24	448	409	68	23	500
1986													
1987         1,370         193         111         1,674         340         65         27         432         429         70         29         528           1988         1,251         180         94         1,525         341         70         24         435         419         76         29         524           1989         1,223         193         98         1,514         334         65         26         425         420         74         29         523           1990         1,275         194         113         1,582         323         63         28         414         409         73         33         515           1991         1,224         193         98         1,515         321         61         24         406         393         71         28         492           1992         1,105         166         94         1,365         295         55         21         371         351         64         26         441           1993         968         143         1,384         312         51         28         391         361         59         38         458 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>													
1988         1,251         180         94         1,525         341         70         24         435         419         76         29         524           1989         1,223         193         98         1,514         334         65         26         425         420         74         29         523           1990         1,275         194         113         1,582         323         63         28         414         409         73         33         515           1991         1,224         193         98         1,515         321         61         24         406         393         71         28         492           1992         1,105         166         94         1,365         295         55         21         371         351         64         26         441           1993         968         142         109         1,218         312         51         28         391         361         59         38         458           1994         986         1,32         1,248         312         51         28         391         361         59         38         458													
1989													
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1992													
1993         968         142         109         1,219         286         50         24         360         344         57         29         430           1994         986         133         129         1,248         312         51         28         391         361         59         38         488           1995         1,064         156         128         1,348         325         53         27         405         378         64         34         476           1996         1,048         157         128         1,333         302         62         30         394         370         65         36         471           1997         1,156         172         112         1,440         325         63         24         412         405         65         31         501           1998         1,111         158         106         1,375         308         56         19         383         397         64         26         487           1999         1,015         152         117         1,284         274         50         23         347         365         59         27         451 <td></td>													
1994         986         133         129         1,248         312         51         28         391         361         59         38         458           1995         1,064         156         128         1,348         325         53         27         405         378         64         34         476           1996         1,048         157         128         1,333         302         62         30         394         370         65         36         471           1997         1,156         172         112         1,440         325         63         24         412         405         65         31         501           1998         1,111         158         106         1,375         308         56         19         383         397         64         26         487           1999         1,015         152         117         1,284         274         50         23         347         365         59         27         451           2000         1,005         150         113         1,268         237         59         21         317         222         61         26         469     <													
1995         1,064         156         128         1,348         325         53         27         405         378         64         34         476           1996         1,048         157         128         1,333         302         62         30         394         370         65         36         471           1997         1,156         172         112         1,440         325         63         24         412         405         65         31         561           1998         1,111         158         106         1,375         308         56         19         383         397         64         26         487           1999         1,015         152         117         1,284         274         50         23         347         365         59         27         451           2000         1,005         150         113         1,268         237         59         21         317         322         61         26         409           2001         876         180         106         1,162         201         57         21         279         274         69         26         369     <													
1996         1,048         157         128         1,333         302         62         30         394         370         65         36         471           1997         1,156         172         112         1,440         325         63         24         412         405         65         31         501           1998         1,111         158         106         1,375         308         56         19         383         397         64         26         487           1999         1,015         152         117         1,284         274         50         23         347         365         59         27         451           2000         1,005         150         113         1,268         237         59         21         317         322         61         26         409           2001         876         180         106         1,162         201         57         21         279         274         69         26         369           2002         915         187         95         1,197         209         55         19         283         297         70         24         391 <td></td>													
1997         1,156         172         112         1,440         325         63         24         412         405         65         31         501           1998         1,111         158         106         1,375         308         56         19         383         397         64         26         487           1999         1,015         152         117         1,284         274         50         23         347         365         59         27         451           2000         1,005         150         113         1,268         237         59         21         317         322         61         26         409           2001         876         180         106         1,162         201         57         21         279         274         69         26         369           2002         915         187         95         1,197         209         55         19         283         297         70         24         391           2003         853         170         108         1,131         203         60         19         282         283         66         26         375													
1999         1,015         152         117         1,284         274         50         23         347         365         59         27         451           2000         1,005         150         113         1,268         237         59         21         317         322         61         26         409           2001         876         180         106         1,162         201         57         21         279         274         69         26         369           2002         915         187         95         1,197         209         55         19         283         297         70         24         391           2004         875         150         100         1,125         205         57         16         278         288         65         22         375           2005         834         150         77         1,061         192         55         12         259         267         67         18         352           2007         802         126         80         1,008         169         46         9         224         241         59         17         317 <tr< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr<>													
2000         1,005         150         113         1,268         237         59         21         317         322         61         26         409           2001         876         180         106         1,162         201         57         21         279         274         69         26         369           2002         915         187         95         1,197         209         55         19         283         297         70         24         391           2003         853         170         108         1,131         203         60         19         282         283         66         26         375           2004         875         150         100         1,125         205         57         16         278         288         65         22         375           2005         834         150         77         1,061         192         55         12         259         267         67         18         352           2007         802         126         80         1,003         173         51         11         235         243         66         16         325	1998	1,111		106	1,375	308	56	19	383	397	64	26	487
2001         876         180         106         1,162         201         57         21         279         274         69         26         369           2002         915         187         95         1,197         209         55         19         283         297         70         24         391           2003         853         170         108         1,131         203         60         19         282         283         66         26         375           2004         875         150         100         1,125         205         57         16         278         288         65         22         375           2005         834         150         77         1,061         192         55         12         259         267         67         18         352           2006         780         153         70         1,003         173         51         11         235         243         66         16         325           2007         802         126         80         1,008         169         46         9         224         241         59         17         317											59		
2002         915         187         95         1,197         209         55         19         283         297         70         24         391           2003         853         170         108         1,131         203         60         19         282         283         66         26         375           2004         875         150         100         1,125         205         57         16         278         288         65         22         375           2005         834         150         77         1,061         192         55         12         259         267         67         18         352           2006         780         153         70         1,003         173         51         11         235         243         66         16         325           2007         802         126         80         1,008         169         46         9         224         241         59         17         317           2008         800         127         74         1,001         160         49         6         215         244         68         13         325													
2003         853         170         108         1,131         203         60         19         282         283         66         26         375           2004         875         150         100         1,125         205         57         16         278         288         65         22         375           2005         834         150         77         1,061         192         55         12         259         267         67         18         352           2006         780         153         70         1,003         173         51         11         235         243         66         16         325           2007         802         126         80         1,008         169         46         9         224         241         59         17         317           2008         800         127         74         1,001         160         49         6         215         244         68         13         325           2009         767         124         57         948         91         34         4         129         148         52         8         208 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>													
2004         875         150         100         1,125         205         57         16         278         288         65         22         375           2005         834         150         77         1,061         192         55         12         259         267         67         18         352           2006         780         153         70         1,003         173         51         11         235         243         66         16         325           2007         802         126         80         1,008         169         46         9         224         241         59         17         317           2008         800         127         74         1,001         160         49         6         215         244         68         13         325           2009         767         124         57         948         91         34         4         129         148         52         8         208           2010         813         127         76         1,016         134         44         6         184         182         57         12         251													
2005         834         150         77         1,061         192         55         12         259         267         67         18         352           2006         780         153         70         1,003         173         51         11         235         243         66         16         325           2007         802         126         80         1,008         169         46         9         224         241         59         17         317           2008         800         127         74         1,001         160         49         6         215         244         68         13         325           2009         767         124         57         948         91         34         4         129         148         52         8         208           2010         813         127         76         1,016         134         44         6         184         182         57         12         251           2011         824         124         74         1,022         145         42         5         192         213         59         11         283           20													
2006         780         153         70         1,003         173         51         11         235         243         66         16         325           2007         802         126         80         1,008         169         46         9         224         241         59         17         317           2008         800         127         74         1,001         160         49         6         215         244         68         13         325           2009         767         124         57         948         91         34         4         129         148         52         8         208           2010         813         127         76         1,016         134         44         6         184         182         57         12         251           2011         824         124         74         1,022         145         42         5         192         213         59         11         283           2012         809         125         66         1,000         140         43         5         188         193         56         10         259           201													
2007         802         126         80         1,008         169         46         9         224         241         59         17         317           2008         800         127         74         1,001         160         49         6         215         244         68         13         325           2009         767         124         57         948         91         34         4         129         148         52         8         208           2010         813         127         76         1,016         134         44         6         184         182         57         12         251           2011         824         124         74         1,022         145         42         5         192         213         59         11         283           2012         809         125         66         1,000         140         43         5         188         193         56         10         259           2013         781         139         79         999         141         46         7         194         194         60         13         267           2014 </td <td></td>													
2008         800         127         74         1,001         160         49         6         215         244         68         13         325           2009         767         124         57         948         91         34         4         129         148         52         8         208           2010         813         127         76         1,016         134         44         6         184         182         57         12         251           2011         824         124         74         1,022         145         42         5         192         213         59         11         283           2012         809         125         66         1,000         140         43         5         188         193         56         10         259           2013         781         139         79         999         141         46         7         194         194         60         13         267           2014         838         151         71         1,060         146         48         7         201         206         65         13         284           2015 </td <td></td>													
2009         767         124         57         948         91         34         4         129         148         52         8         208           2010         813         127         76         1,016         134         44         6         184         182         57         12         251           2011         824         124         74         1,022         145         42         5         192         213         59         11         283           2012         809         125         66         1,000         140         43         5         188         193         56         10         259           2013         781         139         79         999         141         46         7         194         194         60         13         267           2014         838         151         71         1,060         146         48         7         201         206         65         13         284           2015         819         155         75         1,049         142         48         6         196         196         64         12         272           2016 </td <td></td>													
2010         813         127         76         1,016         134         44         6         184         182         57         12         251           2011         824         124         74         1,022         145         42         5         192         213         59         11         283           2012         809         125         66         1,000         140         43         5         188         193         56         10         259           2013         781         139         79         999         141         46         7         194         194         60         13         267           2014         838         151         71         1,060         146         48         7         201         206         65         13         284           2015         819         155         75         1,049         142         48         6         196         196         64         12         272           2016         801         155         71         1,026         139         51         7         197         188         69         13         270           20													
2011       824       124       74       1,022       145       42       5       192       213       59       11       283         2012       809       125       66       1,000       140       43       5       188       193       56       10       259         2013       781       139       79       999       141       46       7       194       194       60       13       267         2014       838       151       71       1,060       146       48       7       201       206       65       13       284         2015       819       155       75       1,049       142       48       6       196       196       64       12       272         2016       801       155       71       1,026       139       51       7       197       188       69       13       270         2017       806       157       78       1,041       133       54       8       195       185       77       14       276         2018       804       147       82       1,033       131       48       9       188       174 <td></td>													
2012       809       125       66       1,000       140       43       5       188       193       56       10       259         2013       781       139       79       999       141       46       7       194       194       60       13       267         2014       838       151       71       1,060       146       48       7       201       206       65       13       284         2015       819       155       75       1,049       142       48       6       196       196       64       12       272         2016       801       155       71       1,026       139       51       7       197       188       69       13       270         2017       806       157       78       1,041       133       54       8       195       185       77       14       276         2018       804       147       82       1,033       131       48       9       188       174       72       16       262         2019       810       150       79       1,038       132       46       7       186       182 <td></td>													
2013         781         139         79         999         141         46         7         194         194         60         13         267           2014         838         151         71         1,060         146         48         7         201         206         65         13         284           2015         819         155         75         1,049         142         48         6         196         64         12         272           2016         801         155         71         1,026         139         51         7         197         188         69         13         270           2017         806         157         78         1,041         133         54         8         195         185         77         14         276           2018         804         147         82         1,033         131         48         9         188         174         72         16         262           2019         810         150         79         1,038         132         46         7         186         182         68         14 <t>264           2020         75</t>													
2015     819     155     75     1,049     142     48     6     196     196     64     12     272       2016     801     155     71     1,026     139     51     7     197     188     69     13     270       2017     806     157     78     1,041     133     54     8     195     185     77     14     276       2018     804     147     82     1,033     131     48     9     188     174     72     16     262       2019     810     150     79     1,038     132     46     7     186     182     68     14     264       2020     757     131     79     967     127     39     8     174     177     63     14     253       2021     797     135     82     1,014     118     45     8     171     180     69     17     266       2022     687     118     57     862     73     32     5     110     131     55     11     197	2013	781	139	79	999		46	7	194	194	60	13	267
2016     801     155     71     1,026     139     51     7     197     188     69     13     270       2017     806     157     78     1,041     133     54     8     195     185     77     14     276       2018     804     147     82     1,033     131     48     9     188     174     72     16     262       2019     810     150     79     1,038     132     46     7     186     182     68     14     264       2020     757     131     79     967     127     39     8     174     177     63     14     253       2021     797     135     82     1,014     118     45     8     171     180     69     17     266       2022     687     118     57     862     73     32     5     110     131     55     11     197													
2017     806     157     78     1,041     133     54     8     195     185     77     14     276       2018     804     147     82     1,033     131     48     9     188     174     72     16     262       2019     810     150     79     1,038     132     46     7     186     182     68     14     264       2020     757     131     79     967     127     39     8     174     177     63     14     253       2021     797     135     82     1,014     118     45     8     171     180     69     17     266       2022     687     118     57     862     73     32     5     110     131     55     11     197													
2018     804     147     82     1,033     131     48     9     188     174     72     16     262       2019     810     150     79     1,038     132     46     7     186     182     68     14     264       2020     757     131     79     967     127     39     8     174     177     63     14     253       2021     797     135     82     1,014     118     45     8     171     180     69     17     266       2022     687     118     57     862     73     32     5     110     131     55     11     197													
2019     810     150     79     1,038     132     46     7     186     182     68     14     264       2020     757     131     79     967     127     39     8     174     177     63     14     253       2021     797     135     82     1,014     118     45     8     171     180     69     17     266       2022     687     118     57     862     73     32     5     110     131     55     11     197													
2020     757     131     79     967     127     39     8     174     177     63     14     253       2021     797     135     82     1,014     118     45     8     171     180     69     17     266       2022     687     118     57     862     73     32     5     110     131     55     11     197													
2021     797     135     82     1,014     118     45     8     171     180     69     17     266       2022     687     118     57     862     73     32     5     110     131     55     11     197													
2022 687 118 57 862 73 32 5 110 131 55 11 197													
									171				
2023e 692 114 65 871 67 29 6 102 122 51 11 184													
	2023e	692	114	65	871	67	29	6	102	122	51	11	184

Note: Years are harvest, not calendar, years (e.g. 2023 refers to the 2022-23 crop year). Data for 2023e are provisional.