| **序号** | **时间** | **有效灌溉面积(千公顷)** | **农用化肥施用折纯量(万吨)** | **农用氮肥施用折纯量(万吨)** | **农用磷肥施用折纯量(万吨)** | **农用钾肥施用折纯量(万吨)** | **农用复合肥施用折纯量(万吨)** | **乡村办水电站个数(个)** | **乡村办水电站装机容量(万千瓦)** | **农村用电量(亿千瓦小时)** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2020 | 69160.52 | 5250.65 | 1833.86 | 653.85 | 541.91 | 2221.02 |  |  | 9717.18 |
| 2 | 2019 | 68678.61 | 5403.59 | 1930.21 | 681.58 | 561.13 | 2230.67 | 45445.00 |  | 9482.87 |
| 3 | 2018 | 68271.64 | 5653.42 | 2065.43 | 728.88 | 590.28 | 2268.84 | 46515.00 | 8043.53 | 9358.54 |
| 4 | 2017 | 67815.57 | 5859.41 | 2221.81 | 797.59 | 619.74 | 2220.27 | 47498.00 | 7926.92 | 9524.42 |
| 5 | 2016 | 67140.62 | 5984.41 | 2310.46 | 829.99 | 636.90 | 2207.07 | 47529.00 | 7791.06 | 9238.26 |
| 6 | 2015 | 65872.64 | 6022.60 | 2361.57 | 843.06 | 642.28 | 2175.69 | 47340.00 | 7582.96 | 9026.92 |
| 7 | 2014 | 64539.53 | 5995.94 | 2392.86 | 845.34 | 641.94 | 2115.81 | 47073.00 | 7322.10 | 8884.45 |
| 8 | 2013 | 63473.30 | 5911.86 | 2394.24 | 830.61 | 627.42 | 2057.48 | 46849.00 | 7117.84 | 8549.52 |
| 9 | 2012 | 62490.52 | 5838.85 | 2399.89 | 828.57 | 617.71 | 1989.97 | 45799.00 | 6568.61 | 7508.46 |
| 10 | 2011 | 61681.56 | 5704.24 | 2381.42 | 819.19 | 605.13 | 1895.09 | 45151.00 | 6212.34 | 7139.62 |
| 11 | 2010 | 60347.70 | 5561.68 | 2353.68 | 805.64 | 586.44 | 1798.50 | 44815.00 | 5924.02 | 6632.35 |
| 12 | 2009 | 59261.45 | 5404.35 | 2329.88 | 797.73 | 564.29 | 1698.69 | 44804.00 | 5512.09 | 6104.44 |
| 13 | 2008 | 58471.68 | 5239.02 | 2302.88 | 780.08 | 545.20 | 1608.60 | 44433.00 | 5127.44 | 5713.15 |
| 14 | 2007 | 56518.34 | 5107.83 | 2297.21 | 773.02 | 533.62 | 1502.98 | 27664.00 | 1366.58 | 5509.93 |
| 15 | 2006 | 55750.50 | 4927.69 | 2262.50 | 769.51 | 509.75 | 1385.85 | 27493.00 | 1243.00 | 4895.80 |
| 16 | 2005 | 55029.34 | 4766.22 | 2229.29 | 743.84 | 489.45 | 1303.18 | 26726.00 | 1099.20 | 4375.70 |
| 17 | 2004 | 54478.42 | 4636.58 | 2221.89 | 735.96 | 467.29 | 1204.00 | 27115.00 | 993.80 | 3933.00 |
| 18 | 2003 | 54014.23 | 4411.56 | 2149.89 | 713.86 | 438.01 | 1109.83 | 26696.00 | 862.30 | 3432.90 |
| 19 | 2002 | 54354.85 | 4339.39 | 2157.31 | 712.23 | 422.37 | 1040.35 | 27633.00 | 812.20 | 2993.40 |
| 20 | 2001 | 54249.39 | 4253.76 | 2164.11 | 705.73 | 399.57 | 983.69 | 29183.00 | 896.60 | 2610.80 |
| 21 | 2000 | 53820.33 | 4146.41 | 2161.56 | 690.47 | 376.50 | 917.87 | 29962.00 | 698.50 | 2421.30 |
| 22 | 1999 | 53158.41 | 4124.32 | 2180.94 | 697.78 | 365.64 | 880.03 | 31678.00 | 664.10 | 2173.40 |
| 23 | 1998 | 52295.60 | 4085.60 | 2234.37 | 682.76 | 346.26 | 822.00 | 33185.00 | 634.80 | 2042.10 |
| 24 | 1997 | 51238.50 | 3980.70 | 2171.70 | 689.10 | 322.00 | 798.10 | 36117.00 | 562.50 | 1980.10 |
| 25 | 1996 | 50381.40 | 3827.93 | 2145.30 | 658.40 | 289.60 | 734.70 | 37743.00 | 533.70 | 1812.70 |
| 26 | 1995 | 49281.20 | 3593.70 | 2021.90 | 632.40 | 268.50 | 670.80 | 40699.00 | 519.50 | 1655.70 |
| 27 | 1994 | 48759.10 | 3317.90 | 1882.00 | 600.70 | 234.80 | 600.60 | 48722.00 | 503.65 | 1473.90 |
| 28 | 1993 | 48727.90 | 3151.90 | 1835.10 | 575.10 | 212.30 | 529.40 | 45153.00 | 481.90 | 1244.90 |
| 29 | 1992 | 48590.10 | 2930.20 | 1756.10 | 515.70 | 196.00 | 462.40 | 48082.00 | 478.55 | 1107.10 |
| 30 | 1991 | 47822.07 | 2805.10 | 1726.10 | 499.60 | 173.90 | 405.50 | 49644.00 | 456.88 | 963.20 |
| 31 | 1990 | 47403.07 | 2590.30 | 1638.40 | 462.40 | 147.90 | 341.60 | 52387.00 | 428.80 | 844.50 |
| 32 | 1989 | 44917.20 | 2357.10 | 1536.80 | 418.90 | 120.50 | 280.90 | 50862.00 | 416.80 | 790.50 |
| 33 | 1988 | 44375.91 | 2141.50 | 1417.10 | 382.10 | 101.20 | 241.20 | 51558.00 | 461.10 | 712.00 |
| 34 | 1987 | 44403.00 | 1999.30 | 1326.80 | 371.90 | 91.90 | 208.70 | 51978.00 | 394.10 | 658.80 |
| 35 | 1986 | 44225.80 | 1930.60 | 1312.60 | 359.80 | 77.40 | 180.80 | 54136.00 | 387.90 | 586.70 |
| 36 | 1985 | 44035.93 | 1775.80 | 1204.90 | 310.90 | 80.40 | 179.60 | 55754.00 | 380.20 | 508.90 |
| 37 | 1984 | 44453.00 | 1739.80 | 1215.30 | 328.60 | 69.40 | 126.50 | 60062.00 | 361.50 | 464.00 |
| 38 | 1983 | 44644.07 | 1659.80 | 1163.80 | 351.40 | 58.40 | 86.20 | 62328.00 | 346.30 | 435.20 |
| 39 | 1982 | 44176.87 | 1513.40 | 1043.30 | 344.80 | 56.70 | 68.50 | 66256.00 | 353.00 | 396.90 |
| 40 | 1981 | 44573.80 | 1334.90 | 942.00 | 295.60 | 40.70 | 56.60 | 74017.00 | 336.00 | 369.90 |
| 41 | 1980 | 44888.07 | 1269.40 | 934.20 | 273.30 | 34.60 | 27.20 | 80319.00 | 304.10 | 320.80 |
| 42 | 1979 | 45003.13 | 1086.30 | 825.90 | 223.50 | 31.60 | 5.30 | 83224.00 | 276.30 | 282.70 |

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| **序号** | **时间** | **粮食单位面积产量(公斤/公顷)** | **夏收粮食单位面积产量(公斤/公顷)** | **秋粮单位面积产量(公斤/公顷)** | **谷物单位面积产量(公斤/公顷)** | **稻谷单位面积产量(公斤/公顷)** | **早稻单位面积产量(公斤/公顷)** | **中稻和一季晚稻单位面积产量(公斤/公顷)** | **双季晚稻单位面积产量(公斤/公顷)** | **小麦单位面积产量(公斤/公顷)** | **冬小麦单位面积产量(公斤/公顷)** | **春小麦单位面积产量(公斤/公顷)** | **玉米单位面积产量(公斤/公顷)** | **谷子单位面积产量(公斤/公顷)** | **高粱单位面积产量(公斤/公顷)** | **其他谷物单位面积产量(公斤/公顷)** | **大麦单位面积产量(公斤/公顷)** | **豆类单位面积产量(公斤/公顷)** | **大豆单位面积产量(公斤/公顷)** | **绿豆单位面积产量(公斤/公顷)** | **红小豆单位面积产量(公斤/公顷)** | **薯类单位面积产量(公斤/公顷)** | **马铃薯单位面积产量(公斤/公顷)** | **棉花单位面积产量(公斤/公顷)** | **油料单位面积产量(公斤/公顷)** | **花生单位面积产量(公斤/公顷)** | **油菜籽单位面积产量(公斤/公顷)** | **芝麻单位面积产量(公斤/公顷)** | **胡麻籽单位面积产量(公斤/公顷)** | **葵花籽单位面积产量(公斤/公顷)** | **麻类单位面积产量(公斤/公顷)** | **黄红麻单位面积产量(公斤/公顷)** | **大麻单位面积产量(公斤/公顷)** | **苎麻单位面积产量(公斤/公顷)** | **亚麻单位面积产量(公斤/公顷)** | **烟叶单位面积产量(公斤/公顷)** | **烤烟单位面积产量(公斤/公顷)** | **糖料单位面积产量(公斤/公顷)** | **甘蔗单位面积产量(公斤/公顷)** | **甜菜单位面积产量(公斤/公顷)** | **蔬菜单位面积产量(公斤/公顷)** |
| 3 | 2018 | 5621.17 | 5198.32 | 5733.80 | 6120.47 | 7026.59 | 5967.04 | 7558.83 | 5957.96 | 5416.61 | 5497.08 | 4217.41 | 6104.29 | 3009.25 | 4702.15 | 2392.88 | 3643.94 | 1885.14 | 1897.96 | 1404.08 | 1523.40 | 3990.53 | 3779.62 | 1819.33 | 2667.24 | 3751.80 | 2027.47 | 1645.26 | 1445.61 | 2707.16 | 3584.67 | 5007.61 | 5723.34 | 1887.52 | 3552.95 | 2118.45 | 2102.83 | 73554.10 | 76891.48 | 52174.47 | 34418.00 |
| 4 | 2017 | 5607.36 | 5276.55 | 5698.61 | 6105.38 | 6916.92 | 5809.82 | 7468.14 | 5958.14 | 5484.13 | 5587.96 | 3981.64 | 6110.30 | 2959.18 | 4866.82 | 2371.86 | 3288.68 | 1832.16 | 1853.59 | 1296.66 | 1628.41 | 3901.49 | 3641.28 | 1769.33 | 2628.15 | 3709.46 | 1995.21 | 1609.67 | 1283.29 | 2690.10 | 3728.51 | 5177.86 | 5692.99 | 1874.40 | 4915.14 | 2115.18 | 2108.12 | 73618.60 | 76132.12 | 53842.67 | 34629.11 |
| 5 | 2016 | 5539.17 | 5193.23 | 5628.30 | 6004.43 | 6865.77 | 5843.63 | 7400.87 | 5954.02 | 5399.72 | 5486.05 | 4144.75 | 5967.12 | 2718.42 | 4726.02 | 2359.09 | 3303.90 | 1777.35 | 1789.23 | 1293.32 | 1521.54 | 3765.04 | 3536.91 | 1670.51 | 2577.53 | 3677.87 | 1982.25 | 1529.27 | 1336.97 | 2502.86 | 3346.45 | 5131.56 | 5238.40 | 1863.04 | 4255.20 | 2129.97 | 2120.77 | 71859.93 | 73638.44 | 55629.84 | 34487.64 |
| 6 | 2015 | 5553.02 | 5187.71 | 5647.64 | 5988.69 | 6891.28 | 5871.34 | 7450.72 | 5992.30 | 5395.68 | 5480.56 | 4118.87 | 5892.85 | 2516.08 | 5183.14 | 2546.55 | 3768.74 | 1793.62 | 1811.44 | 1223.56 | 1428.94 | 3736.39 | 3438.10 | 1564.88 | 2546.47 | 3639.55 | 1972.09 | 1495.03 | 1277.58 | 2643.46 | 2906.82 | 4231.65 | 4458.07 | 1876.54 | 4021.07 | 2134.30 | 2084.23 | 71315.21 | 72528.14 | 52751.25 | 33867.79 |
| 7 | 2014 | 5445.89 | 5041.38 | 5548.86 | 5896.08 | 6813.21 | 5833.71 | 7355.44 | 5980.21 | 5246.36 | 5345.59 | 3792.97 | 5808.91 | 2491.93 | 5091.31 | 2459.55 | 3831.83 | 1773.05 | 1787.33 | 1139.34 | 1483.80 | 3709.69 | 3427.63 | 1508.32 | 2517.36 | 3638.87 | 1943.86 | 1442.93 | 1190.67 | 2699.68 | 2846.10 | 4097.72 | 4477.61 | 1875.42 | 3369.72 | 2036.79 | 2027.46 | 69591.37 | 70682.09 | 51533.47 | 33784.99 |
| 8 | 2013 | 5439.52 | 4851.57 | 5604.02 | 5907.12 | 6717.27 | 5830.08 | 7265.73 | 5800.27 | 5058.97 | 5145.93 | 3800.27 | 6015.93 | 2464.75 | 4993.15 | 2402.12 | 3482.88 | 1734.43 | 1759.89 | 1074.69 | 1472.61 | 3695.36 | 3417.57 | 1509.21 | 2491.46 | 3664.37 | 1895.64 | 1463.59 | 1225.79 | 2643.67 | 2766.64 | 3846.57 | 2969.94 | 1853.67 | 4841.73 | 2074.91 | 2064.73 | 68070.03 | 69986.08 | 44801.08 | 33551.26 |
| 9 | 2012 | 5353.12 | 4785.25 | 5515.20 | 5832.59 | 6776.89 | 5728.46 | 7376.41 | 5902.25 | 4988.61 | 5091.61 | 3613.75 | 5869.69 | 2337.47 | 4072.94 | 2422.56 | 3373.08 | 1786.94 | 1814.38 | 1130.36 | 1680.76 | 3686.32 | 3353.69 | 1515.73 | 2445.58 | 3588.50 | 1864.78 | 1439.45 | 1187.88 | 2574.55 | 2839.76 | 4099.24 | 2830.67 | 1918.91 | 5332.31 | 2102.11 | 2090.47 | 66002.05 | 68263.90 | 45924.10 | 33316.17 |
| 10 | 2011 | 5208.81 | 4637.98 | 5368.71 | 5713.85 | 6687.32 | 5666.35 | 7321.31 | 5699.64 | 4838.22 | 4922.27 | 3704.35 | 5747.51 | 2262.23 | 4170.12 | 2368.44 | 3571.51 | 1797.30 | 1836.25 | 1118.30 | 1775.91 | 3656.36 | 3255.55 | 1440.95 | 2384.73 | 3528.97 | 1826.67 | 1366.04 | 1231.06 | 2500.27 | 2825.63 | 4027.66 | 2976.24 | 2042.37 | 5599.66 | 2114.83 | 2102.87 | 63577.00 | 66113.30 | 41719.74 | 33370.78 |
| 11 | 2010 | 5005.69 | 4530.73 | 5137.89 | 5527.54 | 6553.03 | 5416.26 | 7187.46 | 5739.39 | 4749.70 | 4832.34 | 3664.15 | 5453.68 | 1987.70 | 3792.33 | 2439.10 | 3528.26 | 1693.49 | 1771.22 | 1123.96 | 1514.09 | 3544.11 | 3132.85 | 1321.67 | 2304.99 | 3460.48 | 1747.97 | 1293.04 | 1071.92 | 2381.69 | 2665.36 | 3849.13 | 2245.07 | 2122.26 | 4606.13 | 2163.16 | 2160.46 | 62477.53 | 65271.43 | 38018.05 | 32851.90 |
| 12 | 2009 | 4892.37 | 4531.17 | 4959.16 | 5448.31 | 6585.33 | 5671.40 | 7200.03 | 5688.57 | 4740.84 | 4810.76 | 3905.04 | 5258.49 | 1577.40 | 3080.15 | 2289.12 | 3550.44 | 1616.16 | 1630.23 | 1087.24 | 1498.79 | 3453.35 | 2882.62 | 1390.47 | 2335.08 | 3411.07 | 1887.77 | 1295.16 | 943.48 | 2057.91 | 2784.43 | 4017.46 | 2095.62 | 2053.93 | 4912.51 | 2229.35 | 2249.81 | 65098.12 | 68169.78 | 33844.98 | 33191.58 |
| 13 | 2008 | 4968.57 | 4531.68 | 5080.32 | 5550.83 | 6562.54 | 5523.44 | 7217.43 | 5644.43 | 4763.04 | 4836.28 | 3725.55 | 5555.70 | 1495.14 | 3380.81 | 2396.82 | 3431.97 | 1686.62 | 1702.80 | 1128.33 | 1573.48 | 3528.39 | 3035.51 | 1370.26 | 2294.93 | 3355.14 | 1813.79 | 1205.40 | 1080.01 | 2068.70 | 3178.45 | 3301.80 | 2575.36 | 2218.80 | 4695.96 | 2120.15 | 2118.33 | 67521.27 | 71121.86 | 39245.93 | 32850.75 |
| 14 | 2007 | 4756.09 | 4402.11 | 4825.86 | 5320.51 | 6432.98 | 5490.36 | 7048.44 | 5597.70 | 4607.92 | 4697.66 | 3380.33 | 5166.67 | 1821.17 | 3346.03 | 2360.93 | 3512.45 | 1459.76 | 1453.65 | 1057.96 | 1436.71 | 3469.64 | 2924.86 | 1461.35 | 2257.83 | 3346.53 | 1853.78 | 1155.61 | 894.21 | 1792.78 | 3021.47 | 3032.56 | 2789.15 | 2331.83 | 4215.62 | 2053.09 | 2055.59 | 68794.21 | 73014.56 | 40097.50 | 32772.84 |
| 15 | 2006 | 4745.17 | 4341.70 | 4847.26 | 5310.10 | 6279.60 | 5332.61 | 6884.48 | 5537.16 | 4593.40 | 4653.60 | 3786.53 | 5326.32 | 1911.31 | 2977.57 | 2314.34 | 3762.71 | 1649.24 | 1620.93 | 1297.68 | 1649.89 | 3429.22 | 3062.53 | 1295.26 | 2249.29 | 3257.74 | 1832.64 | 1173.05 | 1015.06 | 1843.15 | 3147.08 | 2780.98 | 4324.41 | 2028.52 | 4905.43 | 2065.67 | 2072.31 | 66753.45 | 70450.25 | 39766.87 | 32425.38 |
| 16 | 2005 | 4641.63 | 4039.48 | 4808.06 | 5224.62 | 6260.18 | 5287.37 | 7012.05 | 5287.13 | 4275.30 | 4329.02 | 3598.65 | 5287.34 | 2100.30 | 4469.53 | 2454.76 | 4145.17 | 1672.42 | 1704.54 | 1419.78 | 1493.60 | 3649.91 | 2904.60 | 1128.88 | 2149.18 | 3076.10 | 1793.27 | 1054.07 | 910.68 | 1889.28 | 3300.67 | 2670.12 | 3808.07 | 2099.24 | 4405.40 | 1968.64 | 1956.03 | 60419.31 | 63969.96 | 37523.46 | 31856.23 |
| 17 | 2004 | 4620.49 | 4017.43 | 4768.63 | 5186.77 | 6310.61 | 5417.69 | 7089.41 | 5178.71 | 4251.92 | 4320.81 | 3430.68 | 5120.20 | 1979.62 | 4102.01 | 2526.22 | 4102.17 | 1743.96 | 1814.78 | 1132.23 | 1381.41 | 3762.02 | 3141.71 | 1110.78 | 2124.57 | 3022.44 | 1812.82 | 1127.97 | 1029.65 | 1660.20 | 3232.74 | 2719.18 | 1804.34 | 2025.15 | 4374.41 | 1901.05 | 1888.66 | 61034.48 | 65198.95 | 30829.35 | 31357.26 |
| 18 | 2003 | 4332.50 | 3745.01 | 4477.25 | 4872.89 | 6060.68 | 5273.95 | 6670.74 | 5285.37 | 3931.84 | 3996.93 | 2995.89 | 4812.59 | 1894.38 | 3962.04 | 2614.05 | 3559.82 | 1649.43 | 1652.89 | 1270.17 | 1487.57 | 3621.27 | 3011.53 | 950.92 | 1875.25 | 2653.82 | 1581.51 | 862.65 | 1003.98 | 1486.24 | 2528.37 | 2462.33 | 2645.49 | 1919.71 | 2993.22 | 1785.34 | 1768.28 | 58172.46 | 64022.78 | 24925.32 | 30095.27 |
| 19 | 2002 | 4399.40 | 3597.19 | 4647.82 | 4885.29 | 6188.96 | 5157.69 | 6914.87 | 5368.40 | 3776.51 | 3824.12 | 3202.15 | 4924.46 | 1908.89 | 3945.44 | 2317.14 | 3632.85 | 1786.82 | 1892.92 | 1226.11 | 1408.59 | 3709.89 | 3007.52 | 1174.96 | 1962.04 | 3011.35 | 1477.20 | 1180.04 | 903.31 | 1720.75 | 2852.89 | 2868.12 | 2022.42 | 1906.96 | 3784.08 | 1842.78 | 1791.76 | 56630.00 | 64663.45 | 30231.83 | 30462.03 |
| 20 | 2001 | 4266.94 | 3642.76 | 4415.87 | 4800.28 | 6163.33 | 5322.55 | 6768.75 | 5605.57 | 3806.13 | 3806.13 |  | 4698.44 | 1713.40 | 3445.65 | 2159.47 |  | 1547.21 | 1624.77 |  |  | 3487.52 | 2736.53 | 1106.80 | 1958.12 | 2888.18 | 1597.19 | 1061.14 | 628.13 | 1454.91 | 2108.94 | 2045.55 | 1639.78 | 1730.58 | 2440.61 | 1753.95 | 1732.45 | 52321.20 | 60625.19 | 26806.70 | 29521.42 |
| 21 | 2000 | 4261.15 | 3609.30 | 4411.43 | 4752.56 | 6271.59 | 5501.54 | 7003.45 | 5459.66 | 3738.22 | 3832.21 | 2865.96 | 4597.47 | 1700.09 | 2904.01 | 2018.78 |  | 1587.67 | 1655.71 |  |  | 3496.93 | 2806.38 | 1093.08 | 1918.68 | 2973.25 | 1518.58 | 1034.21 | 690.34 | 1589.99 | 2023.48 | 2516.17 | 1324.33 | 1684.54 | 2228.45 | 1775.86 | 1763.36 | 50426.30 | 57626.08 | 24518.01 | 29183.67 |
| 22 | 1999 | 4492.59 | 3810.48 | 4684.29 | 4944.95 | 6344.79 | 5407.95 | 7150.00 | 5723.58 | 3946.61 | 4027.84 | 3333.42 | 4944.71 | 1744.10 | 3310.83 | 2151.63 |  | 1692.63 | 1789.16 |  |  | 3515.83 | 2539.98 | 1027.71 | 1870.53 | 2961.09 | 1468.64 | 1065.97 | 731.55 | 1560.43 | 2301.09 | 2540.14 | 1460.62 | 1613.13 | 3161.75 | 1797.53 | 1796.54 | 50700.34 | 57338.32 | 25334.49 | 30354.37 |
| 23 | 1998 | 4502.21 | 3556.18 | 4836.06 | 4952.91 | 6366.19 | 5189.87 | 7322.04 | 5760.19 | 3685.29 | 3772.58 | 3097.75 | 5267.83 | 2212.52 | 4215.06 | 2178.37 |  | 1714.22 | 1782.53 |  |  | 3604.27 | 2768.46 | 1009.33 | 1791.03 | 2942.78 | 1271.77 | 1041.93 | 915.26 | 1647.22 | 2205.73 | 2677.23 | 1389.47 | 1573.78 | 2549.45 | 1736.82 | 1739.97 | 49338.39 | 59549.70 | 24805.93 | 31312.48 |
| 24 | 1997 | 4376.60 | 3986.90 | 4409.88 | 4822.49 | 6319.40 | 5609.24 | 7167.09 | 5579.09 | 4101.87 | 4268.31 | 3045.08 | 4387.31 | 1603.62 | 3358.04 | 2397.57 |  | 1680.01 | 1765.06 |  |  | 3262.47 | 2994.98 | 1024.80 | 1742.47 | 2592.42 | 1479.14 | 919.25 | 653.38 | 1643.68 | 2289.38 | 2648.83 | 1314.08 | 1629.91 | 2510.26 | 1806.94 | 1808.58 | 48810.35 | 60158.14 | 24475.02 | 31858.67 |
| 25 | 1996 | 4482.85 | 3637.18 | 4753.59 | 4894.09 | 6212.35 | 5309.30 | 7082.08 | 5684.96 | 3734.11 | 3846.85 | 3042.25 | 5203.29 | 2359.86 | 4393.09 | 2285.58 |  | 1698.09 | 1770.18 |  |  | 3609.10 | 2839.30 | 890.11 | 1760.69 | 2804.05 | 1366.46 | 969.02 | 858.46 | 1918.87 | 2274.84 | 2487.34 | 1376.50 | 1515.54 | 2880.10 | 1745.09 | 1749.90 | 45293.08 | 56470.46 | 24149.68 | 28714.09 |
| 26 | 1995 | 4239.70 | 3469.40 | 4468.85 | 4659.25 | 6024.77 | 5149.16 | 6838.79 | 5615.93 | 3541.45 | 3669.51 | 2715.63 | 4916.91 | 1982.75 | 3914.40 |  |  | 1591.44 | 1661.44 |  |  | 3427.53 | 2662.86 | 879.36 | 1717.60 | 2686.68 | 1415.49 | 907.70 | 585.81 | 1561.88 | 2386.23 | 2533.67 | 1399.13 | 1514.86 | 3118.71 | 1574.27 | 1583.54 | 43629.53 | 58133.26 | 20132.48 | 27039.00 |
| 27 | 1994 | 4063.23 | 3373.67 | 4246.86 | 4499.70 | 5831.12 | 5106.73 | 6570.06 | 5362.64 | 3426.33 | 3555.52 | 2596.78 | 4693.39 | 2210.80 | 4626.68 |  |  | 1645.41 | 1734.91 |  |  | 3263.54 | 2730.65 | 785.27 | 1646.89 | 2564.34 | 1295.46 | 793.63 | 765.74 | 1698.91 | 2010.49 | 2020.00 | 1294.29 | 1403.51 | 2706.11 | 1502.22 | 1490.73 | 41857.98 | 57668.51 | 17934.71 |  |
| 28 | 1993 | 4130.79 | 3419.89 | 4334.57 | 4557.00 | 5847.89 | 5144.45 | 6590.49 | 5403.29 | 3518.82 | 3640.88 | 2818.30 | 4962.96 | 2182.98 | 4107.48 |  |  | 1575.88 | 1619.09 |  |  | 3450.10 | 2982.70 | 750.06 | 1619.00 | 2491.89 | 1309.24 | 747.11 | 760.43 | 1773.41 | 2288.51 | 2449.02 | 1399.18 | 1340.75 | 2744.12 | 1652.30 | 1654.15 | 45206.34 | 59012.46 | 20124.01 |  |
| 29 | 1992 | 4003.79 | 3260.58 | 4177.21 | 4341.72 | 5803.08 | 5301.71 | 6416.18 | 5333.22 | 3331.18 | 3430.70 | 2788.76 | 4532.66 | 1776.27 | 3596.12 |  |  | 1393.71 | 1426.97 |  |  | 3140.51 | 2534.48 | 659.60 | 1428.40 | 2000.49 | 1280.68 | 691.81 | 746.35 | 1826.15 | 2159.95 | 2233.00 | 1331.37 | 1150.58 | 2863.23 | 1671.65 | 1686.55 | 46216.68 | 58605.46 | 22831.92 |  |
| 30 | 1991 | 3875.69 | 3054.55 | 4095.51 | 4205.96 | 5640.17 | 5064.24 | 6268.71 | 5284.26 | 3100.47 | 3203.02 | 2544.86 | 4578.28 | 1645.42 | 3561.92 |  |  | 1360.96 | 1379.49 |  |  | 2991.65 | 2112.00 | 867.94 | 1420.95 | 2188.68 | 1212.42 | 640.15 | 703.49 | 1798.83 | 1954.46 | 1902.22 | 988.02 | 1070.51 | 2737.61 | 1680.19 | 1709.37 | 43235.08 | 58344.94 | 20791.44 |  |
| 31 | 1990 | 3932.84 | 3124.85 | 4104.40 |  | 5726.12 | 5370.23 | 6434.12 | 5073.44 | 3194.11 | 3286.74 | 2696.29 | 4523.94 | 2007.93 | 3674.10 |  |  |  | 1455.10 |  |  | 3007.76 | 2263.02 | 806.66 | 1479.94 | 2190.69 | 1264.32 | 701.50 | 760.91 | 1878.46 | 2216.21 | 2421.33 | 1524.19 | 1103.69 | 2775.28 | 1649.56 | 1683.05 | 42965.41 | 57117.51 | 21667.60 |  |
| 32 | 1989 | 3632.19 | 2987.13 | 3720.02 |  | 5508.50 | 5124.01 | 6142.44 | 4997.46 | 3042.99 | 3174.02 | 2308.41 | 3877.90 | 1566.27 | 2721.64 |  |  |  | 1269.29 |  |  | 3001.47 | 2211.70 | 727.98 | 1233.09 | 1820.20 | 1088.82 | 467.38 | 571.36 | 1486.13 | 1995.77 | 2309.59 | 1105.13 | 1239.76 | 2506.92 | 1574.11 | 1599.84 | 37969.71 | 50856.06 | 16242.87 |  |
| 33 | 1988 | 3578.57 | 2944.77 | 3658.05 |  | 5286.66 | 5098.98 | 5859.93 | 4675.51 | 2967.96 | 3078.74 | 2279.83 | 3928.08 | 1755.34 | 3136.24 |  |  |  | 1434.15 |  |  | 2978.31 | 2301.92 | 749.57 | 1243.32 | 1912.51 | 1021.87 | 574.89 | 690.59 | 1421.54 | 2460.20 | 3887.32 | 1204.57 | 1170.85 | 2512.23 | 1758.40 | 1792.66 | 37081.77 | 53119.02 | 17196.66 |  |
| 34 | 1987 | 3637.45 | 3026.67 | 3708.17 |  | 5417.86 | 5087.55 | 6066.93 | 4867.22 | 3047.72 | 3212.09 | 2096.56 | 3949.30 | 1688.12 | 2912.54 |  |  |  | 1442.76 |  |  | 3182.71 | 2061.12 | 876.34 | 1366.47 | 2041.95 | 1253.97 | 604.77 | 586.81 | 1399.31 | 2155.49 | 4179.78 | 1185.21 | 1098.65 | 2539.14 | 1721.79 | 1791.21 | 40912.09 | 55142.19 | 16354.64 |  |
| 35 | 1986 | 3529.28 | 3035.97 | 3518.21 |  | 5337.61 | 5199.74 | 6029.12 | 4559.58 | 3040.22 | 3228.50 | 2048.44 | 3705.15 | 1523.52 | 2870.65 |  |  |  | 1400.20 |  |  | 2917.44 | 2114.25 | 822.17 | 1291.13 | 1807.77 | 1196.33 | 614.16 | 649.61 | 1484.56 | 2528.01 | 4116.87 | 1195.49 | 833.79 | 2552.77 | 1517.01 | 1536.76 | 39805.78 | 52865.97 | 15962.78 |  |
| 36 | 1985 | 3483.00 | 2919.32 | 3507.34 |  | 5256.27 | 5097.30 | 5832.36 | 4654.15 | 2936.70 | 3104.69 | 2080.59 | 3607.20 | 1801.13 | 2895.91 |  |  |  | 1360.50 |  |  | 3037.35 | 2159.41 | 806.69 | 1337.67 | 2008.10 | 1247.60 | 657.30 | 676.08 | 1175.32 | 3614.27 | 4153.93 | 1193.14 | 949.82 | 1974.48 | 1847.18 | 1926.53 | 39644.06 | 53429.88 | 15912.83 |  |
| 37 | 1984 | 3608.18 | 2957.96 | 3663.29 |  | 5372.62 | 5194.44 | 6100.13 | 4669.89 | 2969.08 | 3138.35 | 2110.87 | 3960.29 | 1849.98 | 3148.38 |  |  |  | 1330.61 |  |  | 3168.02 | 2217.36 | 903.98 | 1372.45 | 1988.63 | 1232.07 | 554.21 | 677.06 | 1682.35 | 3678.00 | 4661.65 | 931.52 | 1272.26 | 2802.63 | 1993.98 | 2157.56 | 38860.50 | 54279.85 | 16500.30 |  |
| 38 | 1983 | 3395.74 | 2772.83 | 3448.36 |  | 5096.07 | 4836.64 | 5723.00 | 4622.68 | 2801.73 | 2943.88 | 2107.47 | 3623.26 | 1844.66 | 3086.52 |  |  |  | 1289.79 |  |  | 3110.51 | 1972.97 | 763.00 | 1257.38 | 1794.99 | 1168.31 | 441.74 | 518.22 | 1829.15 | 3207.00 | 4493.17 | 709.49 | 1151.95 | 2455.79 | 1798.28 | 2012.27 | 33660.43 | 47607.04 | 16884.24 |  |
| 39 | 1982 | 3124.38 | 2474.21 | 3111.23 |  | 4886.30 | 5047.13 | 5329.86 | 4226.67 | 2449.26 | 2595.08 | 1736.89 | 3265.92 | 1629.25 | 2509.04 |  |  |  | 1072.60 |  |  | 2886.48 | 1941.41 | 617.40 | 1264.82 | 1620.85 | 1372.36 | 354.71 | 525.58 | 1580.35 | 2701.50 | 4313.87 | 547.44 | 1254.27 | 1105.45 | 1938.53 | 2080.08 | 39076.64 | 56452.65 | 14518.68 |  |
| 40 | 1981 | 2827.30 | 2142.26 | 2840.94 |  | 4323.66 | 4654.73 | 4879.05 | 3374.98 | 2106.92 | 2232.04 | 1530.09 | 3047.89 | 1482.31 | 2547.83 |  |  |  | 1162.21 |  |  | 2699.47 |  | 572.34 | 1117.24 | 1547.63 | 1069.50 | 622.97 | 361.55 | 1280.50 | 2667.43 | 4115.28 | 523.89 | 1017.63 | 2263.11 | 1977.87 | 2180.84 | 36500.52 | 53818.06 | 14594.65 |  |
| 41 | 1980 | 2734.31 | 1912.23 | 2823.81 |  | 4129.61 | 4422.99 | 4659.89 | 3287.00 | 1913.89 | 1965.68 | 1678.05 | 3116.38 | 1406.18 | 2515.97 |  |  |  | 1098.76 |  |  | 2829.08 |  | 550.11 | 969.99 | 1539.20 | 838.13 | 333.13 | 386.37 | 1076.91 | 2154.57 | 3497.35 | 549.85 | 858.45 | 1974.08 | 1650.21 | 1806.38 | 31566.47 | 47561.66 | 14241.76 |  |
| 42 | 1979 | 2784.74 | 2125.71 | 2796.14 |  | 4243.83 | 4550.97 |  |  | 2136.82 | 2247.34 | 1586.74 | 2981.93 | 1467.93 | 2403.44 |  |  |  | 1029.42 |  |  | 2598.58 |  | 489.24 | 912.66 | 1360.56 | 870.03 | 494.72 | 407.59 | 924.71 | 1949.96 | 3012.30 | 580.40 | 930.29 | 1867.68 | 1486.66 | 1584.00 | 29415.94 | 42028.73 | 9556.31 |  |
| 43 | 1978 | 2527.30 | 1862.19 | 2543.08 |  | 3978.11 | 4168.44 |  |  | 1844.93 | 1949.29 | 1356.29 | 2802.70 | 1536.06 | 2333.94 |  |  |  | 1058.97 |  |  | 2690.68 |  | 445.30 | 838.58 | 1344.36 | 718.50 | 505.59 | 395.12 | 870.88 | 1799.57 | 2639.32 | 554.59 | 720.99 | 1858.45 | 1584.19 | 1716.93 | 27083.12 | 38496.11 | 8165.69 |  |

以上为数据集来源：[主要农作物单位面积产量-农业-数据免费下载-datavrap数据包-农产品产量-数据可视化仓库](https://www.datavrap.com/html/1/167/172/222/9342.html)

[有效灌溉面积、农用化肥施用量、农村水电站及用电量-农业-数据免费下载-datavrap数据包-农村情况-数据可视化仓库](https://www.datavrap.com/html/1/167/172/227/9333.html)

//学习率设置太大会造成网络不能收敛

//如果学习率设置太小，网络收敛非常缓慢，会增大找到最优值的时间，还有可能进入局部最优解

//循环过多次：过拟合,过少：训练效果不好

/\*学习率为0.01

1.341072

-1.229081

-0.798418

4.158125

0.000237

-1.411272

-0.935230

4.490893

0.000123

1.131585

-0.536197

0.398069

0.821135

0.741150

0.413455

0.158471

-0.002796

0.122436

1.918345

0.016396

-0.913376

-0.561345

3.581497

0.000733

-0.672290

-0.380306

3.141159

0.001717

-0.118684

0.035412

2.130012

0.011281

-0.941524

-0.582482

3.632909

0.000663

从上述九次训练可以看出：训练次数过多后损失反而增大。

/\*学习率为0.02

-4.199711

-3.029151

9.583910

0.000000

-4.199938

-3.029321

9.584324

0.000000

2.182143

1.763171

-2.072394

0.788883

-4.199257

-3.028810

9.583081

0.000000

-4.199484

-4.199030

-3.028639

9.582666

0.000000

-3.028980

9.583495

0.000000

-4.198803

-4.198348

-3.028127

9.581421

0.000000

-4.198576

-3.028298

9.581836

0.000000

-3.028469

9.582251

0.000000

可以看出学习率适当增大可以使网络更快收敛