```
---
title: 丽水市劳动力产业就业状况统计：2001-2020 | Labour Force and Employment
date: 2022-07-24
tags:
    - 其它
    - 数据统计
    - 数据可视化
---
```

摘要：丽水是浙江省下的一个市，近年来在"绿水青山就是金山银山"的口号下发展迅速，人口流动剧烈，产业结构也有翻天覆地的变化。作者希望通过对一些数据的整理与可视化，来展示丽水市的劳动力产业就业状况的变化趋势。

关键词：丽水；劳动力；就业；三大产业<!--more-->

项目背景

丽（lí）水，古称处州，浙江省辖陆地面积最大的地级市；位于长江三角洲地区，浙江省西南部，坐标东经 118°41′～120°26′ 和北纬 27°25′～28°57′ 之间，地势以中山、丘陵地貌为主，由西南向东北倾斜；境设 1 个市辖区：莲都区，7 县：青田县、缙云县、遂昌县、松阳县、云和县、庆元县、景宁县，代管 1 县级市：龙泉市；市域面积 1.73 万平方公里。2021 年末全市户籍人口 269.97 万人。

丽水被誉为"浙江绿谷"，境内海拔 1000 米以上的山峰有 3573 座，龙泉市凤阳山黄茅尖海拔 1929 米，庆元县百山祖海拔 1856.7 米，分别为浙江省第一、第二高峰。丽水人属江浙民系使用吴语，丽水文化属吴越文化。

2005 年 1 月，丽水市被命名为第三批国家级生态示范区；2009 年 12 月，相继被命名为"中国优秀旅游城市"、"中国优秀生态旅游城市"。2010 年 12 月 23 日，浙江省关注森林组委会正式发文授予丽水"浙江省森林城市"称号。丽水获评首批国家级生态保护与建设示范区。2017 年 11 月，获全国文明城市称号。2017 年中国地级市全面小康指数排名第 47。2018 年 11 月，获评 2018 中国地级市全面小康指数 46 名。2018 年 12 月 12 日，被命名为第二批"绿水青山就是金山银山"实践创新基地。

项目内容
问题分析

- 试图得到什么数据，解决什么问题

项目分工

210207237 侯亦驰：数据处理、可视化分析、报告整理

210207104 张予乐：数据处理、海报制作、报告整理

数据来源

中国城市统计年鉴：2000-2020

数据处理

- 陈述数据收集的标准。

{% pdf /img/浙江省城市各产业人口统计.pdf %}

{% pdf /img/代码.pdf %}

数据分析与可视化

三大产业
2001-2020 年间一、二、三产业劳动力人口变化
<div id="myechartsss1" style= "location: relative; width:100%;
height:400px;">
</div>
<script type="text/javascript"
src="https://fastly.jsdelivr.net/npm/echarts@5.3.3/dist/echarts.min.js"></sc
ript>
<script type="text/javascript">
  var dom = document.getElementById("myechartsss1");
  var myChart = echarts.init(dom, null, {
    renderer: 'canvas',
    useDirtyRect: false
  });
  var app = {};
  var option;
  option = {
// title: {
//   text: 'Stacked Area Chart'
// },
tooltip: {
  trigger: 'axis',
  axisPointer: {
    type: 'cross',
    label: {
      backgroundColor: '#6a7985'
    }
  }
},
legend: {
  data: ['第一产业','第二产业','第三产业']
},

```
// toolbox: {
//   feature: {
//     saveAsImage: {}
//   }
// },
grid: {
  left: '3%',
  right: '4%',
  bottom: '3%',
  containLabel: true
},
xAxis: [
  {
    type: 'category',
    boundaryGap: false,
    data: ["2001","2002","2003","2004","2005",
"2006","2007","2008","2009","2010","2011","2012","2013","2014","2015","2016"
,"2017","2018","2019","2020"]
  }
],
yAxis: [
  {
    type: 'value'
  }
],
series: [
  {
    name: '第一产业',
    type: 'line',
    stack: 'Total',
    areaStyle: {},
    emphasis: {
      focus: 'series'
    },
    data:
[4400,4300,4100,4100,4000,3500,3200,2500,2600,2400,2400,2500,1600,1300,764,5
35,526,650,672,454]
  },
  {
    name: '第二产业',
    type: 'line',
    stack: 'Total',
    areaStyle: {},
    emphasis: {
```

```
      focus: 'series'
    },
    data:
[33100,30900,33600,34900,23900,39900,38600,43700,49500,48700,51800,57700,576
00,49600,44548,43944,40800,41519,44226,43540]
  },
  {
    name: '第三产业',
    type: 'line',
    stack: 'Total',
    areaStyle: {},
    emphasis: {
      focus: 'series'
    },
    data:
[89000,91300,88100,92300,86900,96500,94400,101100,106100,109600,113900,12330
0,129400,129200,132516,140321,143028,148039,145221,151082]
  },
]
};
  if (option && typeof option === 'object') {
    myChart.setOption(option);
  }
  window.addEventListener('resize', myChart.resize);
</script>
```

总人口

2001-2020 年间总人口

```
<div id="myechartsss2" style= "location: relative; width:100%;
height:400px;">
</div>
<script type="text/javascript"
src="https://fastly.jsdelivr.net/npm/echarts@5.3.3/dist/echarts.min.js"></sc
ript>
<script type="text/javascript">
  var dom = document.getElementById("myechartsss2");
  var myChart = echarts.init(dom, null, {
    renderer: 'canvas',
    useDirtyRect: false
  });
  var app = {};
  var option;
  option = {
```

```javascript
// title: {
//   text: 'Stacked Area Chart'
// },
tooltip: {
  trigger: 'axis',
  axisPointer: {
    type: 'cross',
    label: {
      backgroundColor: '#6a7985'
    }
  }
},
legend: {
  data: ['年户籍人口']
},
// toolbox: {
//   feature: {
//     saveAsImage: {}
//   }
// },
grid: {
  left: '3%',
  right: '4%',
  bottom: '3%',
  containLabel: true
},
xAxis: [
  {
    type: 'category',
    boundaryGap: false,
    data: ["2001","2002","2003","2004","2005",
"2006","2007","2008","2009","2010","2011","2012","2013","2014","2015","2016"
,"2017","2018","2019","2020"]
  }
],
yAxis: [
  {
    type: 'value'
  }
],
series: [
  {
    name: '年户籍人口',
    type: 'line',
```

```
    stack: 'Total',
    areaStyle: {},
    emphasis: {
      focus: 'series'
    },
    data:
[2485800,2487300,2492800,2494000,2506600,2513900,2525300,2539900,2554300,257
3900,2596500,2513000,2626000,2639000,2657000,2663800,2680000,2690000,2700000
,2710000]
  },
]
};
  if (option && typeof option === 'object') {
    myChart.setOption(option);
  }
  window.addEventListener('resize', myChart.resize);
</script>
```

──────

*从业人员与失业人员**

城镇单位从业人员&城镇私营和个体从业人员&城镇失业人员

```
<div id="myechartsss3" style= "location: relative; width:100%;
height:400px;">
</div>
<script type="text/javascript"
src="https://fastly.jsdelivr.net/npm/echarts@5.3.3/dist/echarts.min.js"></sc
ript>
<script type="text/javascript">
  var dom = document.getElementById("myechartsss3");
  var myChart = echarts.init(dom, null, {
    renderer: 'canvas',
    useDirtyRect: false
  });
  var app = {};
  var option;
  option = {
// title: {
//   text: 'Stacked Area Chart'
// },
tooltip: {
  trigger: 'axis',
  axisPointer: {
    type: 'cross',
    label: {
```

```
        backgroundColor: '#6a7985'
      }
    }
  },
  legend: {
    data: ['城镇单位从业人员','城镇私营和个体从业人员','城镇失业人员']
  },
  // toolbox: {
  //   feature: {
  //     saveAsImage: {}
  //   }
  // },
  grid: {
    left: '3%',
    right: '4%',
    bottom: '3%',
    containLabel: true
  },
  xAxis: [
    {
      type: 'category',
      boundaryGap: false,
      data: ["2001","2002","2003","2004","2005",
"2006","2007","2008","2009","2010","2011","2012","2013","2014","2015","2016"
,"2017","2018","2019","2020"]
    }
  ],
  yAxis: [
    {
      type: 'value'
    }
  ],
  series: [
    {
      name: '城镇单位从业人员',
      type: 'line',
      stack: 'Total',
      areaStyle: {},
      emphasis: {
        focus: 'series'
      },
      data:
[127100,124000,127100,131300,134800,139900,141700,147300,158200,160700,16810
0,183500,189000,180000,177828,184800,184354,190208,190119,195076]
```

```
    },
    {
      name: '城镇私营和个体从业人员',
      type: 'line',
      stack: 'Total',
      areaStyle: {},
      emphasis: {
        focus: 'series'
      },
      data:
[101496,101991,117666,142373,140577,141590,141785,480300,157900,155400,16955
6,182200,226482,285597,356653,473706,540254,470184,0,257231]
    },
    {
      name: '城镇失业人员',
      type: 'line',
      stack: 'Total',
      areaStyle: {},
      emphasis: {
        focus: 'series'
      },
      data:
[5005,5088,5804,6430,6930,7068,7002,7002,7002,6546,9703,9406,9363,8761,8640,
9447,9469,8724,11503,11442]
    },
  ]
};
  if (option && typeof option === 'object') {
    myChart.setOption(option);
  }
  window.addEventListener('resize', myChart.resize);
</script>

------
***第二产业***
*第二产业劳动力人口变化*
<div id="myechartsss4" style= "location: relative; width:100%;
height:400px;">
</div>
<script type="text/javascript"
src="https://fastly.jsdelivr.net/npm/echarts@5.3.3/dist/echarts.min.js"></sc
ript>
<script type="text/javascript">
  var dom = document.getElementById("myechartsss4");
```

```
  var myChart = echarts.init(dom, null, {
    renderer: 'canvas',
    useDirtyRect: false
  });
  var app = {};
  var option;
  option = {
// title: {
//   text: 'Stacked Area Chart'
// },
tooltip: {
  trigger: 'axis',
  axisPointer: {
    type: 'cross',
    label: {
      backgroundColor: '#6a7985'
    }
  }
},
legend: {
  data: ['采矿业','制造业','电力、热力、燃气及水生产和供应业','建筑业']
},
// toolbox: {
//   feature: {
//     saveAsImage: {}
//   }
// },
grid: {
  left: '3%',
  right: '4%',
  bottom: '3%',
  containLabel: true
},
xAxis: [
  {
    type: 'category',
    boundaryGap: false,
    data: ["2001","2002","2003","2004","2005",
"2006","2007","2008","2009","2010","2011","2012","2013","2014","2015","2016"
,"2017","2018","2019","2020"]
  }
],
yAxis: [
  {
```

```
      type: 'value'
    }
  ],
  series: [
    {
      name: '采矿业',
      type: 'line',
      stack: 'Total',
      areaStyle: {},
      emphasis: {
        focus: 'series'
      },
      data: [1500,
1500,
2000,
1900,
1900,
1400,
1300,
1000,
1000,
1000,
900,
1000,
200,
300,
471,
383,
322,
188,
411,
388]
    },
    {
      name: '制造业',
      type: 'line',
      stack: 'Total',
      areaStyle: {},
      emphasis: {
        focus: 'series'
      },
      data: [21200,
19400,
20700,
```

```
20800,
22000,
25100,
24000,
28800,
31700,
31900,
33700,
38600,
36400,
30900,
30546,
30043,
27424,
29559,
30697,
31789]
  },
  {
    name: '电力、热力、燃气及水生产和供应业',
    type: 'line',
    stack: 'Total',
    areaStyle: {},
    emphasis: {
      focus: 'series'
    },
    data: [5500,
5700,
5800,
5900,
0,
6300,
6500,
6400,
8400,
7900,
8000,
8100,
7800,
7800,
7192,
6414,
6484,
6420,
```

```
5483,
5524]
    },{
      name: '建筑业',
      type: 'line',
      stack: 'Total',
      areaStyle: {},
      emphasis: {
        focus: 'series'
      },
      data: [4900,
4300,
5100,
6300,
0,
7100,
6800,
7500,
8400,
7900,
9200,
10000,
13200,
10600,
6339,
7104,
6570,
5352,
7635,
5839]
    }
]
};
  if (option && typeof option === 'object') {
    myChart.setOption(option);
  }
  window.addEventListener('resize', myChart.resize);
</script>


_____
*** 第三产业 ***
*第三产业劳动力人口变化*
<div id="myechartsss5" style= "location: relative; width:100%;
height:400px;">
```

```html
</div>
<script type="text/javascript"
src="https://fastly.jsdelivr.net/npm/echarts@5.3.3/dist/echarts.min.js"></sc
ript>
<script type="text/javascript">
  var dom = document.getElementById("myechartsss5");
  var myChart = echarts.init(dom, null, {
    renderer: 'canvas',
    useDirtyRect: false
  });
  var app = {};
  var option;
  option = {
// title: {
//   text: 'Stacked Area Chart'
// },
tooltip: {
  trigger: 'axis',
  axisPointer: {
    type: 'cross',
    label: {
      backgroundColor: '#6a7985'
    }
  }
},
legend: {
  data: ['批发和零售业','交通运输、仓储和邮政业','住宿和餐饮业','信息传输、计算机服务和
软件业','金融业','房地产','租赁和商务服务业','科学研究和技术服务业','水利、环境和公共设
施管理业','居民服务、修理和其他服务业 ','教育','卫生和社会工作','文化、体育和娱乐业','公
共管理、社会保障和社会组织']
},
// toolbox: {
//   feature: {
//     saveAsImage: {}
//   }
// },
grid: {
  left: '3%',
  right: '4%',
  bottom: '3%',
  containLabel: true
},
xAxis: [
  {
```

```
      type: 'category',
      boundaryGap: false,
      data: ["2001","2002","2003","2004","2005",
"2006","2007","2008","2009","2010","2011","2012","2013","2014","2015","2016"
,"2017","2018","2019","2020"]
   }
],
yAxis: [
  {
    type: 'value'
  }
],
series: [
  {
    name: '批发和零售业',
    type: 'line',
    stack: 'Total',
    areaStyle: {},
    emphasis: {
      focus: 'series'
    },
    data: [8100,
6200,
5500,
4900,
4500,
4300,
4000,
3500,
3700,
3700,
3800,
8000,
8700,
4800,
4336,
3913,
3603,
3443,
3382,
4125]
  },
  {
    name: '交通运输、仓储和邮政业',
```

```
    type: 'line',
    stack: 'Total',
    areaStyle: {},
    emphasis: {
      focus: 'series'
    },
    data: [7700,
7300,
7800,
6400,
0,
5500,
5700,
6000,
6100,
6100,
6500,
4800,
4800,
5300,
5841,
5898,
5654,
6348,
5697,
5308]
  },
  {
    name: '住宿和餐饮业',
    type: 'line',
    stack: 'Total',
    areaStyle: {},
    emphasis: {
      focus: 'series'
    },
    data: [
0,
0,
0,
1500,
1400,
1500,
1800,
1600,
```

```
1600,
1700,
1700,
2700,
2600,
2500,
2425,
2197,
2108,
2008,
1879,
1968]
  },
  {
    name: '信息传输、计算机服务和软件业',
    type: 'line',
    stack: 'Total',
    areaStyle: {},
    emphasis: {
      focus: 'series'
    },
    data: [
0,
0,
0,
2500,
2500,
2600,
3100,
2900,
3100,
3200,
3100,
3300,
3100,
2900,
2936,
2792,
2744,
3180,
3130,
3076]
  },
  {
```

```javascript
    name: '金融业',
    type: 'line',
    stack: 'Total',
    areaStyle: {},
    emphasis: {
      focus: 'series'
    },
    data: [6400,
6100,
5200,
7600,
7400,
8000,
8300,
8100,
9300,
9100,
9900,
10500,
11800,
12200,
12600,
17486,
18839,
21985,
20773,
20513]
  },
  {
    name: '房地产业',
    type: 'line',
    stack: 'Total',
    areaStyle: {},
    emphasis: {
      focus: 'series'
    },
    data: [900,
1200,
1000,
900,
1000,
1100,
1100,
1200,
```

```
        1000,
        1000,
        1100,
        1300,
        1000,
        900,
        1204,
        1131,
        1053,
        1080,
        996,
        1558]
  },
  {
    name: '租赁和商务服务业',
    type: 'line',
    stack: 'Total',
    areaStyle: {},
    emphasis: {
      focus: 'series'
    },
    data: [0,
        0,
        0,
        1500,
        1800,
        2100,
        2300,
        2600,
        4100,
        4600,
        4100,
        5400,
        5600,
        4600,
        3949,
        3957,
        4222,
        4218,
        4475,
        8088]
  },
  {
    name: '科学研究和技术服务业',
```

```
      type: 'line',
      stack: 'Total',
      areaStyle: {},
      emphasis: {
        focus: 'series'
      },
      data: [700,
1000,
1100,
2300,
2500,
2500,
0,
2500,
2600,
2600,
2600,
2700,
3000,
3300,
3498,
3840,
3482,
3379,
3082,
2856]
    },
    {
      name: '水利、环境和公共设施管理业',
      type: 'line',
      stack: 'Total',
      areaStyle: {},
      emphasis: {
        focus: 'series'
      },
      data: [900,
700,
700,
2000,
2100,
2600,
0,
2800,
2800,
```

```
3000,
3800,
3800,
3600,
3800,
3975,
4361,
4010,
4253,
4156,
3957]
  },
  {
    name: '居民服务、修理和其他服务业',
    type: 'line',
    stack: 'Total',
    areaStyle: {},
    emphasis: {
      focus: 'series'
    },
    data: [0,
0,
200,
200,
200,
200,
0,
200,
300,
200,
200,
300,
300,
500,
284,
331,
327,
305,
284,
264]
  },
  {
    name: '教育',
    type: 'line',
```

```
      stack: 'Total',
      areaStyle: {},
      emphasis: {
        focus: 'series'
      },
      data: [28100,
28800,
28600,
25800,
26100,
26200,
26600,
26400,
26600,
27000,
27400,
28900,
29900,
30700,
31528,
32478,
32860,
32841,
33038,
32957]
    },
    {
      name: '卫生和社会工作',
      type: 'line',
      stack: 'Total',
      areaStyle: {},
      emphasis: {
        focus: 'series'
      },
      data: [3800,
4200,
4700,
11100,
11200,
11400,
11900,
12400,
12500,
12900,
```

```
14200,
14900,
16200,
17100,
17790,
18379,
19156,
19368,
19619,
20625]
  },
  {
    name: '文化、体育和娱乐业',
    type: 'line',
    stack: 'Total',
    areaStyle: {},
    emphasis: {
      focus: 'series'
    },
    data: [10200,
10300,
10900,
2400,
2100,
2200,
2200,
2200,
2100,
2300,
2500,
2500,
2600,
2900,
2777,
2857,
2701,
2809,
2527,
2521]
  },
  {
    name: '公共管理、社会保障和社会组织',
    type: 'line',
    stack: 'Total',
```

```
    areaStyle: {},
    emphasis: {
      focus: 'series'
    },
    data: [22200,
25500,
22400,
23200,
24100,
26300,
27400,
28700,
30300,
32200,
33000,
34200,
36200,
37700,
39373,
40701,
42269,
42822,
42183,
43266]
  }
]
};
  if (option && typeof option === 'object') {
    myChart.setOption(option);
  }
  window.addEventListener('resize', myChart.resize);
</script>
```

海报设计

– 数据可视化海报

项目总结

– 总结数据分析结果