

EDITION #3

China's Agricultural Policy Digest

OVERVIEW OF CHINA'S FERTILIZER INDUSTRY

Overview of China's Fertilizer Industry

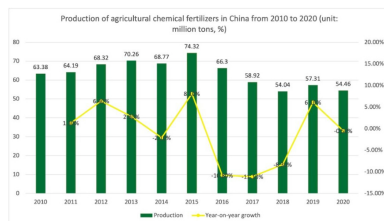
China is one of the most influential countries in the global fertilizer industry, where it accounts for the largest share of the import and export markets of key fertilizers. However, its manufacture and use of chemical fertilizers is set for reduction as the country targets to peak its carbon dioxide emissions before 2030, and achieve carbon neutrality by 2060.

1. Production and application

China accounts for around one-third of the total quantity of fertilizers consumed globally. Currently, nitrogen and phosphate are its most used agricultural fertilizer elements, followed by potassium, albeit at significantly lower quantities.

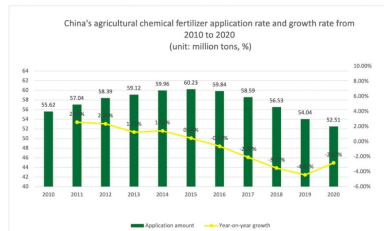
Production

China is the world's largest producer of nitrogen, phosphorus, and potassium fertilizers. The country is self-sufficient in the resources needed to produce nitrogen and phosphate fertilizers for a relatively solid product pricing basis of the two products, a good portion of which is exported. However, it imports a large portion of its potash, although the country has in the last one decade rapidly grown its mobilization of domestic potash resources to lessen its importation-dependence.



From 2010 to 2015, China's fertilizer output showed a fluctuating upward trend, peaking at 74.32 million tons in 2015. Impacted by the government's "Action Plan for Zero Growth of Chemical Fertilizer Use by 2020", After 2015, the output of nitrogen, phosphate, and potassium fertilizers began to show a fluctuating downward trend, dipping over 10% in 2016 and some 11.1% and 8.30% in the next two years, respectively. It climbed 6.1% in 2019, but dropped 0.5% in 2020 to 54.46 million tons.

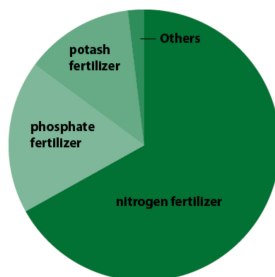
Application



From 2010 to 2015, the total volume of chemical fertilizer application in China's agriculture sector increased year-on-year, peaking at 60.23 million tons in 2015. It is at this point that the country's Ministry of Agriculture and Rural Affairs issued the "Action Plan for Zero Growth of Chemical Fertilizer Use by 2020", leading to a year-on-year decrease in the next five years. China applied 52.51 million tons of agricultural chemical fertilizer in 2020, a 2.83% decline from the previous year, and a 12.25% reduction from 2016.

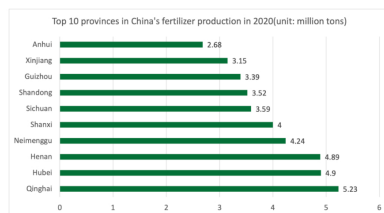
Types of main fertilizers produced in China

Proportion structure of the output of major products in China's fertilizer industry in 2020



China's chemical fertilizer production mostly consists of nitrogen, phosphate, and potash. From the output perspective, nitrogen dominates the country's fertilizer production, making up more than 60% of the total production in 2020, followed by phosphate at 18%, and potassium at 13%.

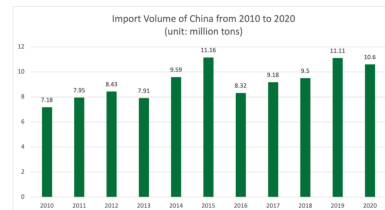
Industrial clusters



Most of China's fertilizer is produced in the country's central and northwest regions. In 2020, Qinghai Province led the production of agricultural nitrogen, phosphate, and potassium fertilizers, reaching 5.231 million tons. It was followed by the Hubei and Henan Provinces, which produced 4.943 million tons and 4.892 million tons of agricultural fertilizers, respectively.

2. Exports and Imports

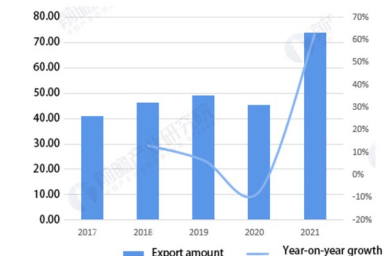
China's fertilizer imports



Between 2016 and 2020, the import value of China's fertilizer sector showed a tendency to grow, before falling in the last year. The total value of chemical fertilizers imported into mainland China in 2021 was around 18 billion yuan, or USD 2.57 billion, an 11% decrease from 2020.

In 2021, China imported fertilizer products from 55 different countries and regions, led by Russia, Canada, Belarus, Norway, and Israel. The Russian Federation accounted for the highest share in China's imports of fertilizer at 28%. The top 10 countries and regions in terms of total dollar value accounted for more than 90% of the imports.

China's fertilizer exports



Total fertilizer exports from mainland China from 2017 to 2021 (unit: billion Yuan, %)

The total export value of China's fertilizer industry from 2017 to 2020 showed fluctuating growth patterns, peaking at 74 billion yuan or USD10.57 billion in 2021, a 63% increase from the previous year. In 2021, China exported its fertilizers to 159 countries and regions, with India and Brazil yielding over 14 billion yuan or USD2 billion each. The two countries accounted for nearly 40% of the total export value.

Source:

The official website of the Ministry of Agriculture and Rural Affairs of China: <http://www.moa.gov.cn/>

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