

Note: Key data/information in this sample page is hidden, while in the report it is not.

## 1 Overview of China's pesticide industry

### 1.1 Development history

Table 1.1-1 Development history of China's pesticide industry

Pesticide development stage	Main events in each stage
Foundation period (1952-1958)	1952 China began to produce benzene hexachloride and diphenyl trichloroethane (DDT).1957-1958 plants for organic phosphorus pesticides were built in .
Initial development period (1959-1980)	1959-1970 Output of organic phosphorus pesticides increased from tonnes to tonnes, accounting for of the nation's pesticide output.
Flourishing development period (1981-1990)	1981-1990 The number of herbicides increased from to . In the early 1980s, China began to produce synthetic pyrethroids and stopped the production of some potentially hazardous varieties of organic chlorides like benzene hexachloride and DDT. China turned to foster some new organic phosphorus items, like methamidophos and carbamates. Some Chinese enterprises began to introduce facilities to produce intermediates.
Mature period (1991-2008)	1991-1997 Herbicide output increased from tonnes to tonnes. In 1995, the total technical capacity of three main herbicides reached t/a, namely glyphosate, acetochlor and butachlor. By 1997, China had become the second largest producer of pesticides in the world, with production capacity of technical and formulations reaching t/a and t/a respectively. China could produce varieties of pesticides.1999-2000 The number of producers with capacity of over t/a increased from to , and these major producers took up over two thirds of China's total capacity. For example, from 1999 to 2000, the output of major glyphosate producers increased by %.2001-2008 The number of pesticide producers reached 2,600 in 2008. The output (calculated by 100% AI) increased from tonnes in 2001 to tonnes in 2008, and China surpassed the US to become the largest producer (by volume) in the world in 2007. The export volume increased from tonnes in 2001 to tonnes in 2008, and the value increased from USD billion to USD billion accordingly. The pesticide production structure also changed, with the proportion of destructive pesticides decreasing from % to %, and that of eco-friendly pesticides increasing from % to %.
Painful period (2009-2012)	2009 The manufacture of chemical pesticides in China maintained a strong growth in 2008, with industrial revenue increasing by % annually. However, because of the negative effect from the global financial crisis, the weak industry performance toward the end of 2008 continued in 2009. Average prices of chemical pesticide dropped significantly in 2009 due to weaker demand, lower raw material price and disordered competition. Therefore, in spite of the % YoY growth in chemical pesticide output in 2009, the revenue of the industry declined by %, which was also attributable to the export decline.2010-2012 In 2011, the total output of pesticides (calculated by 100% technical) is million tonnes, up % from 2010. The export volume increases to about million tonnes (by 100% technical) in 2011. However, there are many problems existing in China's pesticide industry, such as overcapacity for most pesticide varieties, few well-known brands, still serious pollution emission. During this period, many domestic enterprises such as Zhejiang Wynca Chemical Industry Group Co., Ltd. and Jiangsu Yangnong Chemical Group Co., Ltd. have actively entered overseas markets to improve their international competitiveness. Meanwhile, enterprise M&A in China's pesticide industry have been frequent since 2010 and industry integration is being intensified.

Source: CCM

## 1.2 Marked characteristics

The market value of pesticide formulations in China is about USD ■ billion (at retailer level) in 2011, while that of imported products nearly accounts for 20% of the national total. The actual consumption of insecticides, herbicides, fungicides and others is about ■ tonnes (calculated by technical, similarly hereinafter), ■ tonnes, ■ tonnes and ■ tonnes in 2011 respectively.

- ✓ Market value of China's pesticides only takes up ■% in the global pesticide market, suggesting there's still large development space for China's pesticide market.
- ✓ With relatively low labor cost and low waste treatment cost, China has become the world's largest pesticide production base in terms of tonnage. Major production capacity focuses on eastern China, especially Jiangsu, Shandong and Zhejiang Provinces.
- ✓ Traditional and generic products compose the largest proportion of China's pesticide industry, with few pesticides owning independent intellectual property rights.
- ✓ In China, the overcapacity situation is extremely obvious, especially after Q3 2008 when the global financial crisis occurred, which considerably hinders the export of homemade agrochemicals and aggravates the competition in domestic market.
- ✓ Chinese government is adjusting pesticide industrial structure to meet the international standard. Specifically, it has been issuing policies and regulations that are increasingly strict on environmental protection and entrance threshold for producers and product registrations, etc.
- ✓ Industrial concentration keeps intensifying thanks to the cooperation, mergers & acquisitions and reorganizations among dominant producers, while small companies are being continuously washed out.
- ✓ Distribution channels, comprised of sales networks of pesticide sales groups and pesticide producers, are not integrated. But some new distribution modes like chain stores are developing fast in China.
- ✓ Some Chinese farmers' comparatively low brand loyalty to pesticides forces producers to keep launching new products, or at least products with new names in some areas.
- ✓ Management level in many pesticide companies is low and not scientific.
- ✓ Domestic pesticide producers invest little in developing new pesticides compared with multinational corporations. China still lacks high-quality pesticide formulations due to the R&D shortage of adjuvants.
- ✓ The market for pesticides in China is huge but fragmented. In addition, producers are possessed with little self-protection awareness in product patents.