

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

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4.1 Current production and changes of stevia sweeteners

4.1.1 Production volume changes of stevia sweeteners by different grades

China's stevia sweeteners production, including the product category, volume as well as the raw materials used, are mainly driven by major overseas markets, first Japan and South Korea before late 2000s, and then the US and European markets, especially the US market, which have been expanding fast since stevia sweeteners were approved in the US in late 2008 and Europe late 2011.

Major changes and characteristics of stevia sweetener production in China during 2010-2014

- Falling output, for total and almost all grades of stevia sweeteners, with slight differences from grade to grade, during 2010~2013; and output started to climb in 2014;
- Major product grade: mainly low grade stevia sweeteners and RA series crude stevia sweeteners, exported to major markets for further processing into higher grade stevia sweeteners.

Table 4.1.1-1 Output of different grades of stevia sweeteners in China, 2010-2014, tonne

Year	Low-grade stevia sweeteners	RA40-60	RA80-90	STV80-90	RA95 and above	Total
2010	XXXX	XXXX	XXXX	65	247	4,120
2011	XXXX	1,012	XXXX	XXXX	XXXX	XXXX
2012	XXXX	XXXX	288	XXXX	XXXX	XXXX
2013	1,171	XXXX	XXXX	XXXX	XXXX	XXXX
2014	XXXX	XXXX	218	24	XXXX	XXXX

Note: High grade stevia sweeteners include: RA80~99, with RA 95 and above included, and STV 80~90; volume of RA40-60 also cover a small proportion of STV50-60; low grade stevia sweeteners cover the rest stevia sweeteners, such as SG80, enzyme modified stevia as well as tabletop stevia

Source: CCM

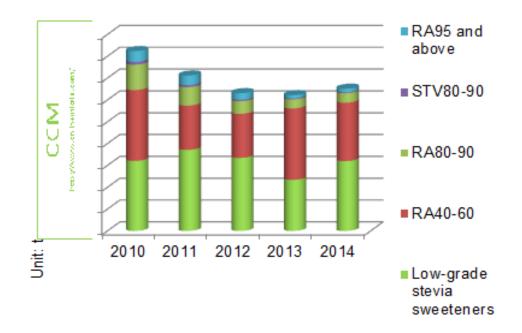
Stevia sweetener output changes in China and reasons

Opening of the US market from 2008, or even earlier as big food and beverage companies like Cargill and Coco Cola, is the direct reason for Chinese producers' rapid capacity expansions during 2007-2010. However, the market didn't grow so fast as Chinese producers' output and capacity expansions. Accordingly, after reaching the peak in 2010, China's stevia sweetener output kept on falling till 2013.

Output growth in 2014 is mainly driven by stevia sweeteners' price hike. After four consecutive years of price drop, some Chinese stevia sweeteners had either been cutting output or

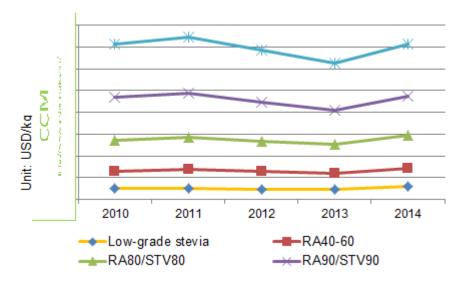
completely suspended production during 2010-2013. Accordingly, inventory has fallen and supply became relatively tight by 2014. Therefore, stevia sweeteners prices started to pick up rapidly from early 2014. For example, crude stevia sweeteners' quotation prices, almost doubled, from USD xx /kg in Jan. and Feb. to around USD xx/kg in Dec.

Figure 4.1.1-1 Output of different grades of stevia sweeteners in China, 2010-2014



Source: CCM

Figure 4.1.1-2 Prices of different grades of stevia sweeteners in China, 2010-2014



Source: CCM

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4.5.2 Trending gap among stevia leave cost, high grade stevia sweeteners' cost and their ex-factory price

As price of stevia leaves accounts for the largest share of RA95's production cost, around xx% of the total cost, the cost changes is mainly driven by price of stevia leaves, while impact from other factors only play a minor role.

Accordingly, the price gap between cost of RA95 and its price is mainly fluctuating with price of stevia leaves. However, with the maturing of production processes, the yield of stevia leaves is increasing, but the impact from the production process improvement has been negligible by far compared to the price changes of stevia leaves.

With continuous price drop of stevia leaves, China's RA95 production cost kept on falling from 2010 to 2013. The price surge of stevia leaves in 2014, however, stopped the trend, and directly pushed up the cost to a record high level at about USD xx /kg.

RA95 cost RA 95% price

Figure 4.5.2-1 Cost and price changes of RA 95% in China, 2010-2014

Source: CCM

4.5.3 Profit strategy from stevia cost price to ex-works price

Although the gap between RA95 cost and price had been big, with the cost accounting for less than 50% of its price, it is unlikely that RA95 price would drop significantly. The major reason is the great price fluctuations stevia leaves in China. If the price of high grade stevia sweetener drops significantly to a level closer to the cost, the large rise of stevia leaves would directly turn the profit into losses.

Therefore, producers need to ensure that the margin between RA95 cost and its price be big enough to be eroded by the price rise of stevia leaves.

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