

Analysis

The economic reforms enacted by Deng Xiaoping in the 1980s reflected a sharp break-away from the guiding ideologies of the Maoist period: Communism and Socialism. Rural reforms incentivized farmers to produce at unprecedented rates. The decollectivization of agriculture spurred increases in agricultural production and productivity. Farmers were given the opportunity to produce up to a government quota and retain the remaining surplus production to either sell on the market or keep for themselves. As a result, farmers were not beholden to their plots. They could venture out to start new businesses or engage in other forms of productive economic behavior. The release of this surplus labor greatly contributed to the economic growth of China. Since then over 500 million people have been lifted out of extreme poverty.¹

One way to understand this increase in productivity is by looking at the gross production output of agricultural products and the change in yearly production output. Holding constant the level of technology and capital provided for agriculture activity, gross output and the annual growth rate of production are good indicators of productivity.

Questions:

- 1) As China continues to grow it will need to feed its population. What are the trends?
- 2) Are staple grains like wheat, rice, maize, barley, rye, millet, and sorghum considered inferior goods (as income increases, demand decreases)?
- 3) Is sweet potato considered a “peasant” food?
- 4) Have dates stayed popular in Chinese cuisine and medicine?
- 5) Are beer, pig-meat, and vegetables an indicator of increased incomes? Are they normal goods (as income increases, demand increases)?
- 6) Has exposure to the West affected China’s coffee consumption?

I chose Wheat, Rice, and Maize as the “staples1” item group because these are common grains used for human consumption and animal consumption. Additionally, they are one of the cheapest and easiest types of crops to grow. For a largely poor agrarian society, diets consisting of mainly grain are not uncommon. Barley, Rye, Millet, and Sorghum are the “staples2” item group, also very commonly grown grains. I also created objects for the Feed classification for these item groups. As China continues to grow and people are pulled out of poverty, people will naturally demand a more varied diet that is less calorie packed but more suiting to their tastes (meat, vegetables, alcohol, etc.). These staple goods may be produced for the purpose of feeding animals not humans. Therefore, the data should reflect a general increase in yearly gross output of the staple goods (Food) but at a decreasing rate. For animal consumption of the staples goods, the data should reflect an increase in gross output and an increase in the growth rate.

The first graph “Staple Goods (Food) Production” reflects an increasing trend in the gross production of wheat, rice, and maize. This can be explained by the growing population in China. Looking at the “Staple Goods (Food) Annual Production Growth Rate” confirms that overall

¹ World Bank

output is declining at a decreasing rate. Meanwhile, the growth rate for wheat (Feed) has increased over the years.

I personally know several elderly Chinese individuals who detest sweet potatoes. Their aversion to it can be explained by their overconsumption of it during the tumultuous periods of the Chinese Civil War, Great Leap Forward, and Cultural Revolution. Sweet potatoes are easy to grow and packed with nutrients and calories. They are the perfect peasant crop. I wanted to see if sweet potato production had decreased as China's economy grew. Both graphs of gross output and rate of change indicate that the supply of sweet potatoes for human consumption is decreasing. Although, a few anecdotes cannot explain the entirety of a trend, I found it extremely interesting that sweet potato production had decreased over the years as China grew richer.

Dates are an extremely coveted and popular fruit in China. They are full of nutrients used in herbal medicine. I wanted to see if the Cultural Revolution or the reforms of the 80s altered Chinese culture so much so that it changed production. While there were a few sudden drops in production in the late 70s, date production has steadily increased and grown.

I was curious to see if beer, pig-meat, and vegetables could be considered normal goods or luxury goods. Jensen and Miller have found that another way to measure hunger and undernutrition is by looking at consumption behavior rather than pure caloric intake.² As people are brought out of poverty, they will demand more varied foods. Gross output for all three items increased.

Finally, I was just curious to see if a predominantly tea-drinking country was affected by global consumption trends. Coffee product output has increased over the years. This data doesn't explain if it's for a domestic market or foreign market. But overall, it is clear that after China opened up to the world, its agriculture market was affected by overall consumption trends.

Further Research:

Conclusions reached here are affected by the omitted variable bias, I did not account for what the overall demand is for food. I also did not look at how much of the food demanded is met by foreign supply and how much is met by domestic supply.

² Jensen, Robert T., and Nolan H. Miller. A revealed preference approach to measuring hunger and undernutrition. No. w16555. National Bureau of Economic Research, 2010.