**Op-Ed Contributing Writer**

**On Becoming China’s Farm Team**

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Look at the [$4.7 billion purchase](http://dealbook.nytimes.com/2013/09/06/national-security-panel-approves-smithfield-sale-to-chinese-company/?ref=smithfieldfoodsinc) in September of the pork producer Smithfield Foods by Shuanghui International Holdings Ltd. -- the Chinese firm that counts Goldman Sachs among its backers -- from the standpoint of the Chinese. As this century’s economic titan, they had to “take a position” in United States pork. China’s population of nearly 1.4 billion is not only growing rapidly but growing wealthier rapidly, and flattering us by emulating our consumption patterns (for better or worse) while having trouble replicating some our production systems.

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China has notorious problems with food safety; urban Chinese consumers distrust the quality and safety of their own food system, and express clear preference for imported food when it is available. What to do when you are the largest pork supplier in China, you have production and quality problems, must meet the ravenous demand for more meat from hundreds of millions of paying consumers, and the international supply is abundant? You buy [the world’s largest pork producer](http://www.nbcnews.com/business/chinese-get-ok-buy-american-pork-producer-4B11243408) and processor, together with that firm’s vaunted supply chain, quality controls, brand value and consumer appeal.

Sadly, there may be only one potential upside to this deal for most Americans, and that one is ironic. We might see a marginal improvement in the quality of industrially produced pork by [ridding it of ractopamine](http://www.foodconsumer.org/newsite/Environment/agriculture/controversial_drug_used_in_beef_pork_and_turkey_1103130221.html), a lean-meat growth stimulant whose effects on humans are [sufficiently questionable](http://www.decodedscience.com/ractopamine-its-whats-for-dinner/26921) that its use for meat production is illegal in the European Union, Russia and China. Smithfield says that as of June, [50 percent](http://www.foodsafetynews.com/2013/06/smithfield-sale-raises-new-questions-about-future-of-ractopamine/#.Ungg3JFIeIU) of its pork is ractopamine-free, the better to please its new masters.

But can Americans buy Smithfield pork without ractopamine? Maybe, maybe not. At the moment, there’s no way to know.

The other upsides are for the Chinese, and of course, Smithfield shareholders, though Smithfield executives would have you believe otherwise. Larry Pope, Smithfield’s C.E.O., who is no doubt glowing about what turned out to be a $34-per-share premium, was cheerleading in [his testimony](http://oklahomafarmreport.com/wire/news/2013/07/00057_SmithfieldSenateAgHearing07112013_051649.php#.Unghk2Ra3j8) this past summer before the Senate committee on Agriculture, Nutrition and Forestry. He said that the purchase -- the biggest ever of a United States company by a Chinese one -- “provides enormous benefits … for American manufacturing and agriculture,” and claims it will result in more production, jobs and exports.

“It’ll be the same old Smithfield, only better,” Mr. Pope said.

The Chinese produce and consume [half the world’s pigs](http://www.nytimes.com/2011/07/16/world/asia/16china.html). They have a pork strategic reserve not unlike our petroleum reserve. Really. They’ll buy more pork from us when they can and need to, but not simply because a Chinese company owns the factory. (Would you, for example, be more likely to buy a Kia if Goldman Sachs bought the Korean carmaker? For that matter, can you be certain that they haven’t?) If they did, and pork became scarcer, prices would climb; producers might consider that a good thing but consumers would not. Almost anything that reduces consumption of industrially produced meat is a plus, but reducing its production is equally important, and there’s the rub, or one of them.

The benefits for Shuanghui are crystal clear: As is the case with 90 percent of the pork produced in the United States, almost all of Smithfield’s “farms” use now standard techniques, including large (average: 2,000 pigs) concentrated animal feeding operations, or CAFOs,in which pigs are confined, fed with legal but problematic drugs and use enormous amounts of feed, water and energy while generating giant lagoons of manure. (That Smithfield has made some progress in manure disposal and even confinement are minor if not insignificant factors when the entire production model is assessed.)

Smithfield has also bred what might be the world’s leanest and therefore most profitable pork, using genetic research paid for in part with tax dollars through [public support of research](http://www.prosperousamerica.org/2013/07/10/coalition-letter-to-cfius-on-proposed-shuanghui-smithfield-deal/#_ftn87) at land-grant universities. Technologically speaking, the almost inconceivably huge Chinese pork industry is primitive. This is an instantaneous technology transfer that doesn’t involve spying but cash.

Given what they just outsourced, why would the Chinese *not* want to buy the whole shebang? According to Kai Olson-Sawyer, a research and policy analyst at the Grace Communications Foundation who has [blogged extensively on this subject](http://gracelinks.org/blog/3329/water-hogs-smithfield-pork-deal-trades-us-water-for-waste), “The CAFO system has major impacts on environmental and human health, rural communities and animal welfare. And basically, taxpayers pay for it all: we subsidize the production of cheap grain used as feed, and are ultimately stuck bearing the environmental, public health and socioeconomic costs of industrial livestock production.”

The fact is that China is going to be a net importer of food more or less forever: it’s got a fifth of the world’s population (and eats a fifth of the world’s food), but only nine percent of its agricultural land and [scarce water resources](http://www.circleofblue.org/waternews/2012/world/choke-point-china-ii-introduction/). (The average pig takes nearly [600 gallons of water](http://www.gracelinks.org/blog/1143/beef-the-king-of-the-big-water-footprints) to produce a pound of meat.)

So even more than a technology grab, the Smithfield deal is a land and water grab. We still have the world’s most enviable combination of arable land, rainfall and temperate weather, and there’s no practical technological substitute for any of these. It’s the consumption of these resources, along with the manure deposits, that make the Smithfield deal, to [paraphrase Warren Buffet](http://money.cnn.com/magazines/fortune/fortune_archive/2003/11/10/352872/)t, a form of colonization by purchase rather than conquest. In short, the deal, as [Minxin Pei wrote](http://finance.fortune.cnn.com/2013/06/04/smithfield-china/) in Fortune, is “really about owning access to America’s safe farmland and clean water supplies.”

Put aside for a moment the arguments of those who see a better way to eat and produce food more sustainably. And put aside that most Americans remain ignorant of how food is produced and the effect that production has on land, water, energy and even climate. Just say this: all agriculture has impact, which means it uses resources and leaves behind waste. We implicitly accept some of that impact because we want, for example, the pork.

The Smithfield-Shuanghui deal guarantees China the pork while offloading the downsides (the “externalities”) of pork production onto The Land of the Free. It guarantees us cropland devoted to chemical-dependent monoculture; continued overuse of water and other resources, none of which we can afford to squander; and great big stinking piles of manure. In sum, it transfers the environmental damage of large-scale pork production from China to the United States without even guaranteeing us pork with as few chemicals as that shipped to China.

Welcome to China’s farm team.

# The real reason behind Shuanghui's purchase of Smithfield

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## It's not just a combination of property rights and market demand -- environmental factors are the impetus behind the deal.

By Minxin Pei

FORTUNE -- A week after the announcement that Shuanghui International, China's largest pork producer, has struck a deal [to purchase Smithfield](http://money.cnn.com/2013/05/29/news/companies/smithfield-foods/index.html), the largest U.S. pork producer, for $7.1 billion (including debt), the development is still being digested. Many theories have been advanced to explain the deal -- which is so far the largest acquisition of an American firm by a Chinese company. Some people see this move by Shuanghui, a private firm based in Henan, as a masterstroke to expand its ability to supply a fast-growing market with premium-brand pork at higher prices. Some view the purchase as a means to acquire valuable hog-farming and processing technology. Others worry that Shuanghui might use Smithfield as a channel to sell its products in the U.S.

As with other Chinese purchases of American assets, this particular deal can be seen [from several perspectives](http://money.cnn.com/2013/05/31/news/companies/smithfield-foods/index.html). Except for the understandable, but unfounded, fear that this transaction could open the door for unsafe Chinese food to find its way into American supermarkets, most interpretations manage to tell part of the real story. Yes, Shuanghui's acquisition will help increase its ability to supply China's market. But here we need to have some perspective. Per capita consumption of pork in China last year was 85.3 pounds, compared with 59.3 pounds in the U.S. When you factor in the difference in the size of each country's population -- 1.344 billion vs. 314 million -- the Chinese demand for pork is still about six times larger than in the United States.

In 2012, the number of hogs slaughtered by Smithfield, which has about a quarter of the U.S. slaughter capacity, would account for only 3% of China's slaughtered hogs. In other words, Shuanghui may be able to source more of its pork from Smithfield's modern, efficient, and safe pig farms and processing facilities, but the quantity that can be exported to China in the foreseeable future will be miniscule relative to the size of the Chinese market.

**MORE:**[**Microsoft stages nebulous Chinese comeback**](http://tech.fortune.cnn.com/2013/05/29/microsoft-china-piracy/)

What about taking advantage of Smithfield's technology and management? On paper, this is an attractive proposition. American pork farming is a consolidated modern industry with economies of scale. Eighty-seven percent of the pork sold in the U.S. is produced on big pig farms with more than 2,000 hogs. Such farms are climate-controlled and self-contained to minimize the spread of disease. By contrast, the Chinese pork industry is fragmented, small-scale, and low-tech. Seventy percent of the pork in China is produced by pig farms with 500 hogs or less. Hygienic conditions are often primitive.

However, transforming a Chinese pork producer like Shuanghui into a Smithfield faces two difficult hurdles. The first one is property rights. Land is owned by the state, and private property rights are insecure in China. Consolidating the hog industry in China, while technologically feasible, can be a legal and bureaucratic nightmare, even for an entrepreneurial company such as Shuanghui.

The second hurdle is practically insurmountable. Whatever technology one might want to use to make the Chinese pork industry more efficient, ensuring the safety of the feed will be almost impossible because of widespread pollution in China.

This touches upon perhaps the real driver behind Shuanghui's acquisition of an iconic American food producer. It may be about all of the things mentioned in the intensive media coverage of the deal. But there is more.

When we exhaust our analysis, we should find that the most strategic explanation for this acquisition is China's environmental degradation. For years, observers have been trying to figure out the real-world consequences of the extensive pollution of air, water, and farmland in China as a result of its rapid economic growth. Various estimates have been used to calculate the economic costs and human toll of pollution (estimates of the costs of pollution range from 5 to 8% of GDP, depending on the value of a statistical life used for the exercise). Such numbers are shocking but abstract.

With Shuanghui's purchase of Smithfield, these numbers are less abstract. The real story behind this transaction is that far-sighted Chinese entrepreneurs fully understand that, because pollution has contaminated major parts of China's food chain, their future profit opportunities lie in buying the entire food-production process abroad. Bagging Smithfield, in this sense, is not about getting its hogs, pork-processing technology, or even premium brand. It is really about owning access to America's safe farmland and clean water supplies.

This strategic calculation is truly brilliant. Based on official Chinese data, more than two-thirds of its waterways are polluted. A sample study of farmland conducted in the late 1990s showed 10% contaminated with heavy metal. A three-year national survey of soil conditions completed in 2010 must have yielded such alarming data that the Ministry of Environmental Protection declared the data a "state secret."

Given the fact that cleaning up land and waterways despoiled by heavy metal and other carcinogens requires huge amounts of money and takes a long time, buying food producers that own their land and have access to safe water supplies is a far more attractive proposition.

If this analysis is correct, the Shuanghui purchase of Smithfield is a harbinger of things to come. Pressured by the catastrophic consequences of environmental degradation, Chinese food producers will have no choice but set their sights abroad. No doubt, this will present great business opportunities for many, but a rapid increase in Chinese acquisitions of food companies overseas will almost certainly create tensions between China and the rest of the world. Sadly, there are no good policies in place to address this challenge.

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