

EMPIRES OF FOOD: The Three Gorges Dam

Environment, Sociology, Commerce

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Figure 1. The Three Gorges dam under construction (October 2004). Photo: Yogh.

Editor's Introduction

In their ambitious book *Empires of Food*, authors Evan D.G. Fraser and Andrew Rimas take on a huge topic: the cause-and-effect relationship between food systems, societies and governments or, as they phrase it in the book's subtitle, "feast, famine and the rise and fall of civilizations." This is historical context as well as advice for college students, who have only a vague idea of where food comes from.

One valuable aspect of their writing is the ease with which they move from science to sociology to history to commerce. In a series of specific episodes, they show how the management of food production has both empowered and doomed empires. A second attribute of this work is its present-mindedness, not so much a warning as an explanation of what is happening today in the taxed-to-the-limits global food network, and what is likely to happen tomorrow.

I find that few class assignments gain traction with my cadets unless I can show that it can contribute to their immediate well-being and future prospects, both career and happiness. The topic of food certainly grabs their attention; this is information that our students need as they make decisions about the food they eat.

For me, food is a rich classroom topic to teach because it is so immediate. What you had for lunch (and where it came from), working in a restaurant (every class has students with vivid experiences of this), articles on health care, obesity studies, students' eating habits, differences in families and what they cook, films like *Fast Food Nation* – there are so many solid critical thinking and writing assignments which can connect to this one.

The lucky thing for us is that Evan Fraser and Andrew Rimas write so well. They make their scholarship accessible. In this interview and excerpt, they begin their narrative with the gigantic new dam China has built and use it to introduce readers to their master thesis. [What follows is an interview with one of the authors and a lesson plan to accompany use of the excerpt from their book which can be found in the full *Empire Studies Magazine* article on our website, under the same name.]

The Three Gorges Dam: How Does the World's Largest Dam Affect Global Food Supply?

by Evan D. G. Fraser and Andrew Rimas

Interview with Evan D. G. Fraser (July 2011)

You begin your remarkable book, Empires of Food, with a look at the Three Gorges Dam (along the Yangtze River in the Hubei Province of eastern China, completed in 2008). Why did you start a book about food with a dam?

The Three Gorges Dam is one of the wonders of the modern world and a metaphor for the potential of technological progress as well as the threat of what happens when our technology might let us down. Also, the Three Gorges Dam is a symbol that reminds us that China is a new superpower. Due to its population, wealth, and political clout, it will shape the way we eat for the next generation.

A little-known Italian trader of the 16th Century, Francesco Carletti, is a central figure of your book. Why did you choose him?

What attracted us about Francesco Carletti is that he was one of the first Europeans to describe many food stuffs that have become commonplace: potatoes, bananas, hot chocolate. So he gives us a glimpse into what the world was like when true globalization was just beginning. Also, his writing is very funny and his journal is extremely entertaining so we felt his story would give our book, which is on a serious topic, a somewhat more human and fun side.

Saint Benedict is another unlikely hero in your history of food production. Can you describe his "successful business model" and its influence?

Benedict's main contribution was to write up the rules by which a monastery in Europe's "Dark Ages" (circa 400-900 AD) should operate. This then became essentially one of the world's first franchise operations with outlets opening across Europe. These monks were then able to control food production, processing, storing and retailing, thereby becoming very wealthy. So, we argue that there are some strong parallels between the role that the Benedictine Monasteries played in Medieval Europe and the way that multi-national food companies play today.

You point to a number of assumptions we make about our food supply today. Which do you feel is the most fragile, or suspect?

There is a pretty strong scientific consensus that the 2050s, 60s and 70s won't have as good weather as the 1950s, 60s or 70s. This worries me because the way farming systems have

evolved over the past 100 years depends on good weather. At the same time, we've created a permanent class of poor and economically marginalized people. When the weather turns bad, I think that major parts of the world will become significantly less productive and the economically marginal people will not have the buying power to obtain the food they need to survive.

One of the recent food "revolutions" is the slow food movement. How will this simple-seeming idea bring such widespread change?

Slow Food is emblematic of a cultural shift whereby consumers are willingly becoming much better informed about food and the processes by which food arrives in our kitchens. Since we live in a market oriented democracy, I believe that most change comes from consumers and voters. To make real progress in reforming our food system, therefore, we need more educated consumers who vote both in the ballot box but also with their wallets for change. Slow Food is part of this process.

What do emerging nations have to learn from empires of the past, empires which failed to keep their people fed and paid the price?

Maintaining rural incomes and diverse agro-ecosystems are probably the best ways of protecting rural communities that are peripheral in the world's economy. In the short term, developing export crops for sale in rich markets seems like a good idea. However, cases such as famines in England's Colonies in the 1870s suggest that export economies do not have the resilience to withstand environmental problems like drought. So, it's a balancing act: using exports to grow incomes, while maintaining diverse, vibrant, local markets.

Was the Green Revolution a blessing or a curse? What would Norman Borlaug say if he were alive today?

The Green Revolution has helped boost yields, and allowed hundreds of millions of people to live better. However, in using these technologies we have made our food system dependent on cheap oil and good weather, both of which are unlikely to continue into the future. This has happened because we have used green revolution technologies to create farming systems that are extremely productive yet not very thrifty when it comes to energy nor very resilient when it comes to pests of droughts. So, I think Norman Borlaug would probably advocate using our technologies to help create more resilient lower energy agro-ecosystems. Of course this will likely come at the expense of some productivity. But in ecological systems, everything comes at a tradeoff.

A pirate named James Lancaster plays a role in your narrative. What can we take away from his experience?

James Lancaster was a swashbuckling buccaneer during the Elizabethan era who helped found England's overseas trading empire. So, he's an interesting and exciting character to write about. On a more serious note he represents how the spread of food empires tends to be quite rapacious and exploit the people who produce the food that elite members of society enjoy.



Figure 2. Illustration commissioned by JES copyright @ 2011 Margaret Hurst.

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Postsecondary Lesson Plan to Accompany “The Three Gorges Dam and Empires of Food”

[You may find the excerpt from Evans and Rimas’ book, *Empires of Food*, on *Empire Studies Magazine’s* website. Click [here](#) for access. Copyright @ 2010 Evan D.G. Fraser and Andrew Rimas. Reprinted with the permission from The Free Press.]



Figure 3. Rice harvester, representative of the industrial food production. Photo Felipe Stahlhoefer.

1. What is the authors’ thesis?

2. How do they prove it?

3. What does the size of the Three Gorges Dam have to do with food? Does it apply to people who do not live in China?

4. Please look up a man named Norman Borlaug, who has been called the father of the green revolution. Who is he? When did he live? What is the “green revolution?” Would Norman Borlaug be happy today? Why or why not?

5. According to the authors, genetically modified foods – they mention the “super rices,” varieties which are twice as productive, or which produce their own insecticide – are an important part of the global food system.

But new and unexpected problems are developing with GM foods. Please read the following article about two legal cases:

- ✓ “Neighbours’ GM Stoush a Test Case,” <http://au.news.yahoo.com/thewest/a/-/breaking/9936660/neighbours-gm-stoush-a-test-case/>.
- ✓ “USDA Won’t Regulate Genetically Modified Grass Spurring Superweed,” <http://www.popsci.com/science/article/2011-07/usda-wont-regulate-genetically-modified-grass-spurring-superweed>.

What are these cases about? Who is right? Should the government regulate all of these new GM plants? Are these “the tip of the iceberg”?

6. What did you have for breakfast? How far did each ingredient travel to get to your plate (if it is locally grown = 1 unit of measure). See if you can find out where the meat and fruit and vegetables at your grocery store were grown.

7. What are the four assumptions which we make about food empires – and how do the authors say these assumptions are flawed?



Figure 4. Cotton harvester. Photo U.S. Department of Agriculture.

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