

The Paradox of Plenty

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As a follow-up to the previous episode with Jennifer Clapp, author of *Titans of Industrial Agriculture*, this episode looks at the essential paradox at the heart of the larger food system; the more efficient industrial farming becomes, the more the productivity and efficiency of the food system as a whole goes down. The external costs of the modern food system — climate change, environmental pollution, and especially human health — are not reflected in the overall balance sheet.

Professor Tim Benton has been working on the interface between agriculture and food politics and environment for his whole career. So isn't cheaper food a good thing?

Tim: Is it a good thing? Yes, to an extent. But of course, the end result has been that, you know, from a human health perspective, food has become cheaper and more available, and so people consume more. But the human health effect through overeating is huge on a global basis. And of course, in order to make food cheaper and cheaper and cheaper, costs have been externalised widely on the natural environment. So the cheaper food that we have, that everybody benefits from in terms of having to spend less money on it, actually helps drive climate change, biodiversity loss, soil degradation, pollution and human ill health. So depending on whether you see immediacy of having cheaper food as a positive thing or the stacked up costs in a systemic way as a negative thing, you could argue in either direction, and people do.

Jeremy: I mean, the conventional economic view would say the food system is a success of the market in operation. But you say it's actually a failure.

Tim: Again, it depends where you, I think, where you put your boundaries on the question. Because yes, clearly, if you look at the absolute production of food on a global basis over the last 60, 80

years, it has gone up enormously. And it hasn't taken a huge amount more land for that production to go up enormously. And lots of people make a lot of money from it. And economic growth benefits; because we spend less money on food, we have more money to spend on other forms of consumption. But ultimately it's a success that is based on undermining social sustainability in the terms of health services and environmental sustainability, in terms of biodiversity and climate change, and all the other stuff. So, you know, you could argue that the tobacco industry was a successful industry or the oil industry is a successful industry. But if you look at it in the round, in the kind of long term what it does for the people and the planet, then you could also argue it's not a success.

Jeremy: So how do you start to turn it around? I mean, it's worked so well for the people with a vested interest in it working well. How do you begin to turn things around?

Tim: Well, yeah. Therein lies a whole nest of vipers. Really, in a sense, we have built this food system, as with many kind of elements of our modern life institutionally, over the kind of period since the Second World War. The food system took kind of leaps and bounds ahead following the kind of WTO trade agreements and the kind of liberalising of trade on a global basis in the 80s and 90s and so on. And so we built this behemoth of globalised food, very long supply chains, over a very long period of time. And to a certain extent, most people in the world more or less eat the same sorts of ingredients from the same relatively few commodity crops, grown in enormous intensity and scale and shipped all around the world. And things are grown in one place and processed in another place, and then shipped back and packaged somewhere else and turned into food, you know. And so we have this very complex, very large food system which is deeply embedded in the kind of globalised world with enormous power vested in the big companies that control it.

And so we describe it as kind of fairly locked in, in the sense that ... But as you know, to a certain extent, we're all recognising, as with the kind of fossil fuel industry, as with kind of any big forms of industry, the power of that industry is often bigger than the power of sovereign governments. And so the degree to which a government can say, let's regulate this sector, is often constrained by issues of the global markets and so on. So as we found in the UK post-Brexit, you know, the amount of sovereignty that a government has is relatively

small relative to the amount of sovereignty a government might think it has.

And so, to answer your question, how do you change this around? I can't see easy ways of changing it around because it's not down to people's preferences in a sense, because, you know, an individual consumer is not going to change the shape of the market. Even a large number of consumers is not necessarily going to change the shape of the market. You know, there's a live debate in the UK at the moment with the Trumpian trade dynamics around if Trump says we will only reduce tariffs if you will accept chlorine-washed chicken. And everybody in the UK says, no, we don't want chlorine-washed chicken. Will the politicians have to accept it because they need the trade deal on multiple fronts, etc.? So consumers don't necessarily, and citizens don't necessarily, have a voice. My own feeling is that the only way the system will change is in response to events, dear boy, events in the sense that we are moving into a different geopolitical regime.

We're moving into — or we are in — a world where we've gone from kind of rules-based cooperation into much more contested, competitive international agreements. Nobody really knows whether or not the rules of trade exist. And, I mean, I was quite interested to see the other day that China had put in a complaint against the US within the WTO. Will anybody pay attention to that? I mean, in the old days, yes, those sorts of things were important, but not anymore. So I think what with climate change adding complexities around countries needing to worry for the first time in decades in the rich world around food security *sensu strictu*, supply chain disruptions becoming more difficult, more contestation and conflict happening around the world, I think there will come a time where the globalised, big, long supply chains, ultra processed food being shipped all around the world, ingredients coming all around the world, will become quite difficult and challenged.

And therein might lie ... some of the kind of shackles of the lock in might be broken under those sorts of circumstances, and we might have an opportunity to kind of reinvent the food system at a more local, more regional scale as opposed to this globalised behemoth that nobody has any control over other than the kind of really vested interest of the incumbents.

Jeremy: That's comprehensive, but also slightly scary. Let's scale back somewhat. One of the issues is that when people talk about food productivity, they talk about yield per hectare. That's it. You know, how much can we get off this area of land? And I've seen attempts to measure food productivity differently. You know, how much of our daily food needs is this hectare providing in terms of nutrition? Have you seen any movement in the way we measure agricultural productivity?

Tim: Well, there are various kind of academic forays into, to thinking about agricultural productivity. But basically we have a kind of framework for the way that our economic systems work, which is based on GDP, the gross domestic product product, and the kind of, the way we measure our economies is about how much money goes around and how ultimately, how productive, how efficient, different manufacturing sectors are. So the basic kind of measure of productivity economically is output per unit input. And from a farming perspective, it's just so easy to fall back into the traditional total factor productivity, that you have a certain number of hectares: are you increasing the amount of product you're getting out of those number of hectares or are you not? And no matter how much of the increasing the amount you're getting out of those number of hectares comes from degrading the long term soil structure, or polluting the water or polluting the atmosphere, those tend not to be counted in these simple measures of efficiency. And so government loves the idea of growing more per unit area. The market loves the idea of growing more per unit area. And ultimately growing more per unit area often ends up in cheaper food for us, so we tend to like the idea. But it's all because we're not accounting for what the output per unit area is being used for, whether it's productive use of the productivity, or the external costs that are levied on ecosystems and natural resources through pollution, etc.

Jeremy: So okay. So it's hard to measure our way to a better system because it's actually more difficult to measure our way to a better system. And currently government is not actually able to do much of that. So let's forget about regulation for a minute. Given what you've said about the costs to human health, do you see any future in being able to say, well, if we spend this money on changing agriculture, we will save even more money on dealing with the consequences of current agriculture. In other words, shifting spending from health care to a better agricultural system.

Tim: Yeah. Well, many people have argued, myself included, exactly for that. And the UN's Food and Agriculture Organization with other institutions, in their report published last ... November before last, estimated that the global healthcare costs of our food system through poor diets was something like \$7 trillion.

Jeremy: Which is unfathomable.

Tim: Yeah. So that's broadly 7% of global GDP. And it's much greater than the kind of profit, in a sense, that comes from the agricultural system *per se*. So it doesn't make sense to say, let's just carry on as we are, making a profit from food and agriculture, but paying an even bigger cost from food and agriculture in diets. But then again, that misses the fact that our system is pretty locked in. And you can make exactly the same argument with climate change, in the sense of the longer we don't mitigate our emissions, the more the long term costs look bigger and bigger and bigger. And as Lord Stern in his ... the Stern report from decades ago pointed out that a relatively small cost of the, you know, 20 years ago would turn into an enormous benefit by 2050, and we were not willing to pay that relatively small cost. And so we're behind the curve on climate change, and we'll be behind the curve on food.

You know, I do think there will come a time where the healthcare budget, especially in countries like the UK, where we pay kind of upfront for it, the NHS, we won't be able to afford the curative healthcare that we're used to and we'll have to start investing more in preventative healthcare. But I think that's a really hard argument politically, particularly in a world where the geopolitical tensions are going up and everybody's having to spend more and more on defence, you know, investing in the future. Many, particularly on the right wing, would argue, you know, let the future take care of itself. Now is the important ... We don't want to worry about the future. Some technology will come along and solve all of those issues. And let's stick with the status quo.

So whilst it makes rational sense to say, let's get preventative healthcare right through proper diets to save in the long term costs, let's get our food system right to avoid environmental costs, because in the long term, they will build up, the power and incumbency and the kind of lock in and the way we do things, the politics of it, any

change is, you know, *giletes jaune*, farmers on the streets, you know, any kind of hint of doing things differently is politically very difficult.

Jeremy: You've been at this for a long time. Are you at all optimistic?

Tim: Oh, Jeremy. Am I at all optimistic? Well, we know exactly what to do.

Jeremy: Yeah, but you mentioned you mentioned Lord Stern's report on climate change. We knew exactly what to do then, but people weren't prepared to do it.

Tim: Exactly. So I think, you know, our own worst enemy is us. And I think as I've got closer and closer to retirement, the more I kind of recognise that it's not ... there's not a knowledge deficit, there isn't a technological deficit, there isn't an equity deficit in the sense of, you know, we need to do this in a certain way. We can do what we want to do and what we would need to do if we wanted to do. But that would mean that it would rattle the cages of the politically, economically most powerful people. And, you know, as you can see, just looking at the politics in the United States on a daily basis, the issue of making people poorer in the name of the public good is seen very much as, you know, extreme socialism and Marxism. And you're right on the ... If you believe in public goods and you believe in sustainability, then for half of society at the moment, that is seen as a negative thing because, you know, you're seen as trying to constrain the ability of the other half of the population to do what they want.

So I think we could do what we want. And I suspect that in the long run, I mean, we will have to deal with climate change. But to get to the point where we create some sort of centrist middle ground that unites the left and the right, it will require quite a big negative event for the politics to be able to work out.

And, you know, one of my colleagues said years and years ago, what we just need is just a jolly good war to throw all of the balls in the air and to reinvent the way we do things. You know, so much, in retrospect, so much positive about, you know, our social approach to economic growth came out of the Second World War; the National Health Service and a whole range of other things. But they only appeared because the war created the conditions where we had to rebuild our economies. And at the moment we're not in that situation and we're just polarised and we're not going to do it.

Jeremy: Yeah. And I mean, a war would be a horrible thing. Nobody wants a war. But somehow that's the only kind of external threat that seems to carry any kind of weight. It requires an existential threat, and nobody recognises the other threats as existential.

Tim: Yes, indeed. And, you know, I've been arguing, as you say, on this sort of point for decades. And if you just look back over the last 20 years or so, we had the great financial crisis. We had food price spikes in 2007, 2011. We've had the Ukraine war, we've had Covid, we've had climate change impacts. We've had, you know, a very large number of fairly major conceptions on a global basis. And each time people like the UN Secretary General have stood up and said, we've got to build back better, we've got to build back greener. But we've just built back to where we were beforehand as fast as possible. And so none of the things that we've lived through over the last 20 years have done anything but actually re-embed and retrench the way that we're traditionally doing things. So it needs to be a bigger, bigger event than that.

But again, if you look at climate change, you know, we are approaching the seventh cycle of the IPCC reports. You know we've been going ... We're coming up to COP 30, the conference of the parties, number 30 in Brazil this year. Every few years, we get another big report saying we know the science better. We can estimate the costs more. We must do more and more and more. And everybody says yes, yes, yes. And nothing gets done. And no amount of knowledge is changing the kind of the real deep embedded power structure. And there is an awful lot of yes, we agree we need to change, but we can't do it just yet. And, you know, you play that real existential threat of climate change, you play that out against the food system issues and biodiversity loss or any other the or healthcare issues. You just see the same kind of politics of delay. And again, it just comes down to in favour of the existing incumbents, you know. Broadly, it's difficult politically if you're going to create losers, particularly losers in the economic elites for the politics of that to play out. So everybody kicks the can down the road.

Jeremy: You know, there's this idea about voting that, you know, you get to vote when you're 18 and you can keep voting until you're dead. And there have been proposals for lowering the age of the vote. I wonder, if you gave people between the ages of, say, 12 and 36 the vote, only, maybe we'd get different forms of government.

Tim: Yeah, it's a great idea. But again, the politics of getting that sort of decision ...

Jeremy: Well, I just thought I'd throw that out there.

Tim: ... be willing to vote for that in our kind of current cycle. Yeah. No, I think you're exactly right. It's not ... You know a lot of the kind of push back against radical change is driven by people who aren't going to face the consequences of the radical change and want the kind of status quo to continue in whatever form. And it's interesting to think about, and when I was at Chatham House, we used to do this a lot, you know, what forms of democracy would allow, in a very polarised society, allow a kind of central middle ground to emerge that will tackle some of these challenges. And it's really difficult to imagine how the politics might work and what sort of systems might work to allow you to do this. Because, you know, if we don't get to grips with these challenges, then ultimately the only thing to happen is some big calamity at some point in the future where the planet bites back and says, I've had enough.

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