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# Feeding Frenzy Debate

By Graham Burnett, Gareth Dale, James Heartfield, et al

Last week Mute hosted an open discussion entitled 'Feeding Frenzy: Food, Fuel and Finance' in which we tried to connect the recent food crisis to a chain of 'crises' - first the credit crunch and, following hard on its heels, the unprecedented hike in fuel prices. We would like to continue this debate here with your help!

The idea behind the talk was not only to forge links between these events, but also to move beyond a polarised discussion in which one side advocates the blind embrace of biotechnology and high-input agribusiness, and the other advocates the total abandonment of industrialised food production. This 'third position' seemed to split the discussion between those who saw our ability to feed the world as premised on a transformation of social relations and those who saw the utopian gesturing towards a revolutionary solution as irresponsible given the urgency of the current crisis.

Contributions were made by the following speakers before opening the debate up to the floor: Gareth Dale (author of recent critiques of 'green capitalism' including 'On the Menu or At the Table: Corporations and Climate Change', <http://www.isj.org.uk/index.php4?id=369&issue=116>), James Heartfield (author of *Green Capitalism: Manufacturing Scarcity in the Age of Abundance*), Helena Paul (co-director of Econexus, <http://www.econexus.info/> and long term campaigner against GM and Agrofuels), Graham Burnett (vegan-punk permaculturist and founder of <http://spiralseed.co.uk>).

Some speakers have sent in their transcripts so that the discussion could be continued online. Please feel free to use the comment function at the bottom of the page to join in the debate (NB. it's necessary to register first before using this function). If you would like to watch the video of the debate please go to: [http://www.archive.org/download/ff\\_mute\\_01/food\\_frenzy\\_edited\\_a.avi](http://www.archive.org/download/ff_mute_01/food_frenzy_edited_a.avi) For more details on the talk, see: [http://www.metamute.org/en/feeding\\_frenzy\\_a\\_discussion\\_on\\_food\\_fuel\\_and\\_finance](http://www.metamute.org/en/feeding_frenzy_a_discussion_on_food_fuel_and_finance)

[IMAGE]

## Contribution from James Heartfield

In terms of brute output, capitalist agriculture has been phenomenally successful. There are six billion people on the planet. Mechanisation, hybrid grains, and fertiliser - the 'Green Revolution' - have led to an increase in yields measured not just in percentages terms, but in factors of four, five and six, over the last century. It is the application of modern farming methods that puts food on those six billion plates so that those people can live.

To take part in any sensible discussion of farming, it seems to me, we need to know that whatever changes we make must take account of that. Any reorganisation of farming - such as foregoing fertilisers, or reducing mechanisation, or returning to small plots - that leads to a reduction in output will have to be accompanied by a proportionate policy of population reduction to be taken seriously, and I do not want to go down that route.

What is more the increased productivity of farming is the reason that most people in this room are not farmers. We can feed Britain with less than one per cent of the population working in agriculture, while in the less developed world, as many as sixty or even seventy percent of the population is still tied to backbreaking toil.

And not only do we get more food from less work (increased productivity), we also get more food from less land (increased yield). That means that since 1981 the land under cultivation has been shrinking, even as the net output is increasing - a good thing it seems to me.

Still, there is a problem. Scientific agriculture has been so successful that farmers have found it difficult to make any money out of it. Up until very recently, remember, agri-business was overproducing, prices were falling and farmers were bleating that they could not sell their goods except on loss-making terms. Both the US and the EU put policies in place twenty years ago to wind down agricultural production, policies that used subsidies to retire land from production.

These are policies that are often wrapped up in a lot of green ideological cover, land management schemes and so on.

Unfortunately, these policies to reduce output are pulling one way, just as rising incomes in the developing world are pulling in another. More people want more food, just as the west is imposing a programme of output reduction.

They don't care. Agri-business does not feed people because it is interested in people. It does it because it is interested in making money. High prices do not hurt them, they hurt us.

Lots of people have made the mistake of seeing an immediate scarcity and assuming that it was an absolute scarcity.

Even Marx thought that he had discovered the limit to agricultural productivity in the nitrogen cycle discovered by Justus Liebig. But Marx made a howler. The scientific identification of the nitrogen cycle was the basis of overcoming that relative limit to yield increases. That is why Liebig is known to Marx's epigones as the man who proved that agricultural productivity had reached its limit, but to agronomists as the man who showed how those limits could be overcome.

Of course it is theoretically possible we might reach a natural limit to human existence - the decay of the earth's orbit around the sun, for example. But we are nowhere near any such point. We have only come up against relative limits, shortages in the amount of oil coming out of the ground, not in the amount in the ground; shortages in the amount of wheat harvested, not in the amount that could be harvested.

To fix the immediate problem of (relative) food scarcity today, we need to plant rapaciously which is to say, reverse the policy of retiring farmland that has been in place for the last two decades. We need to spread the 'green revolution' farming techniques into Africa. That will mean challenging the horrid assumptions behind the Bruntland report (1988) that Africans are only capable of handling 'appropriate technology', hoes not combine harvesters.

We should be on guard against the argument that says we can fix the problem on the demand side, by reducing consumption. No doubt we could all lose a few pounds. There is nothing wrong with curbing appetites on a personal basis. But public campaigns to reduce consumption are just a smokescreen to shift the blame for the failure of agri-business to meet human need. It is not the demand side that needs fixing, it is the supply side. We should expect farm output to increase as people's expectations of a healthy life increase.

Above all we need to make sure that we do not do anything that will jeopardise output, like the adoption of less productive farming techniques. We should not confuse the hobby of gardening, the attempt to overcome the alienation of modern industry emotionally, with a practical solution to the problem of food production.

In the debate, I find I am frustrated by those contributions that assume that the issue of food productivity is only of interest as an illustration of the essential opposition between Capitalism and Socialism. The problem with that approach is that it gives the same answer, whatever the question is. I see it the other way around. This is a real problem in the here and now - a bread-and-butter issue, if you will. Saying that the solution is revolution is just abstract propagandism.

Working class living standards are under attack, right now. In the supermarkets, householders are making sacrifices to balance their budgets; at the fuel pumps, men and women are wondering what they will have to give up to be able to get to work, or visit their parents at the weekend. If radicals cannot give a practical answer to that problem in the week, what does it matter that they dream about Socialism on a Sunday?

Let's face it the left never got anything out of the red-green alliance. They abased themselves before the (no longer) trendy ideas of the greens, but got nothing back. They just lent the backward-looking, austerity plans of the environmentalists the radical glamour of 'anti-capitalism'. ('Reds, pretending to be greens, pretending to be reds,' as one friend of mine in the SWP explained the movement.)

[IMAGE]

## **Contribution from Gareth Dale**

### Some Thoughts on the Interconnections Between the Food, Fuel and Financial Crises

Over the last six months or so, riots or other protests over the soaring price of food have shaken a dozen countries or more. Many others have imposed restrictions upon food exports. Clearly we're living in a period of an upward hike in food prices - many would speak of a 'food crisis.' But what sort of crisis is this, and what factors are forcing prices up? Is it long-term or short-term, a hike or a spike?

To address the problem it's helpful to think of it in three registers: long-term trends in agricultural productivity; recent trends in food supply and demand; the role of speculation. I'll briefly look at all three, starting with the middle one.

Of recent factors affecting supply and demand: four have caused the food price inflation:

- Crop yields have fallen in Australia due to lack of rainfall and in northern Europe because of too much.
- A large part of the U.S. maize crop has been turned over to agrofuel feedstocks.
- Increasing meat consumption in China and India is pushing up demand for grain (to feed animals).
- Higher energy prices raises farming costs (due to the costs of transport, mechanised equipment, pesticides and nitrogen-based fertilisers).

An additional contributory factor is, of course, urbanisation, but that is a very long-term trend.

These factors go some way towards explaining the price rise. The shift to agrofuels alone is responsible for almost a third of the grain price rise. But most contribute only marginally. Rising demand for grains for animal feed, for example, has risen only around 1-2 percent each year since the late 1980s - that adds up to a lot of additional demand, but is an incremental increase that cannot explain the soaring prices of recent months.

If you then consider the fact that spring wheat prices leapt 25 percent in *just one day* earlier this year it's clear that much of the rise has less to do with supply/demand than with speculation - essentially, gambling about future prices. This is the second register.

The point of futures purchases in agricultural commodities is supposed to be that future commodity prices are stabilised, compensating for seasonal fluctuation and enabling farmers to finance current production through future sales. In practice, futures speculation breeds volatility. Speculators pile into a rising market, encouraging hoarding, which sends prices higher still. We can all, incidentally, join in the game. Banks have long offered customers investment funds specialising e.g. in metals and oil; now they offer food futures too.

Of course there is a rational kernel to the current price rise - the demand/supply situation mentioned above. But it clearly has a bubble element to it. And it is related causally to other currently ballooning and recently burst bubbles in the major economies. The bursting of the global housing bubble generated turmoil in financial markets, prompting speculators to seek safer investments in commodities futures markets. Speculation in energy, notably oil, also contributes to rising food prices because (i) agrofuel production becomes more profitable, leading to greater areas of land being devoted to the production of agrofuel feedstocks, (ii) input costs for agriculture rise.

It is tricky enough to pin down the degree to which the food price rise is a bubble, but more controversial is the question of what is taking place in the last of the three registers, that of agricultural productivity.

The most basic long-term factors affecting productivity are the level of investment and the organisation of production. In the Global South, the Green Revolution saw the transformation of agricultural production, but its triumph was double-edged. It saw the consolidation of agribusiness and the destruction of traditional ways of life; the development of monocultures with their grave ecological defects; and greatly increased dependence on energy inputs (notably oil). Productivity in agriculture did soar, but the increased yields led to slumping prices - of 75 percent between 1974 and 2005.

By the mid-1980s bloated food surpluses depressed prices and brought the Green Revolution to an end. Globally, government spending on agriculture (as a proportion of total public spending) halved in the 25 years from 1980. Productivity growth in agriculture slowed markedly. Global yields per hectare rose 2% a year between 1970 and 1990 and then fell to 1.1% over the succeeding period. Productivity enhancements over the next decade are expected to average less than 1% p.a.

As to future trends there are, to put it simply, two possible prognoses. If one explains recent productivity decline as the result of lower investments due to the low food prices of the last quarter of the twentieth century, then the current rise in prices would lead to a prediction of rising investment and increased acreage under the plough. In this scenario, mass malnutrition would be unavoidable, but only a temporary phenomenon.

If the focus is instead upon soil depletion, water shortages, the shift to agrofuels and the secular rise in energy prices, then a more drawn-out, catastrophic outcome would be the prognosis. Some commentators - e.g. in *The Guardian* - write of imminent global hunger resulting from a full-blown crisis of food production (as opposed to distribution). Talk of such a crisis is not scaremongering. The

declining productivity growth mentioned earlier is real, as are problems associated with worsening water shortages and soil depletion. Global grain inventories are at forty-year lows, and this means that harvest failure in one region of the world can have disastrous effects globally.

It does not, however, follow from this that increased price volatility and starvation are inevitable. There *is* enough food to feed the world. The UN's Food and Agricultural Organisation points out that there is today, on average, 15 percent more food available per person than there was 20 years ago, despite a population increase of 1.8 billion. It noted that food production continued to outstrip population growth - 2,360 calories were available per person in the mid 1960s, compared to 2,800 in 2002 - and expected this to continue, predicting that in the coming decades enough food will be produced to meet the demands of a growing population.

Clearly, then, there are problems facing food production: water shortages, soil depletion, urbanisation, the shift to agrofuels. But the threat of mass malnutrition and famine has little to do with production and everything to do with distribution. This is a matter of social structure: the market mechanism ensures that food is directed towards effective demand rather than need.

Insofar as there are signs of a crisis of agricultural output, this too is essentially a matter of social structure. The low investment levels we see today are not necessary, but the outcome of low profit rates. And because the market takes no account of 'externalities' - including the natural surroundings - capitalist agriculture tends to encourage farming processes that despoil the environment.

The long-term trend is towards the commodification of all aspects of agriculture. The result is to subject people's livelihoods ever more to a mechanism over which they have no control, to concentrate power over the world's foodstuffs in the hands of six or seven giant agribusinesses, and to create the potential for enormous price fluctuation through speculation. The central problem, then, is the sway of the market. As to solutions, in the short term my recommendations would be, above all, that working people and the poor should resist the imposition of austerity by participating in pay campaigns, food riots, etc. Food price inflation, in this country and elsewhere, is widening the income gap and this should not be tolerated. In addition, campaigns against GM crops should continue, unaffected by the food crisis. Although I see no reason that they should be absolutely proscribed for all time, they have not significantly raised yields in the world's key crops, and even were they to do so, it is a red herring to pretend that increased supply is the urgent task. The threat of famines and mass starvation is essentially about the maldistribution of food, and not a crisis of underproduction.

### **Some notes on the discussion**

The discussion, in my view, proceeded along two tracks: (i) a conversation amongst 'agreens,' socialists and anarchists, for all of whom the despoliation of the planet is a serious concern, as regards what is happening, why, and what can be done to address it; (ii) a debate as to the appropriateness or not of the prevailing model of capitalist agriculture. In my view (ii) is the key issue, so I shall focus upon it.

[IMAGE]

The proponent of the prevailing model was James Heartfield, of 'Spiked.' His case: in terms of brute output, the capitalist model of agriculture has been a tremendous success. It has fed the world. He praised agribusiness, presenting it as the proponent of "scientific methods of agriculture," and proceeded to sketch out his two adversaries: reactionary utopian "deep greens," and middle-class proponents of green lifestylism. By subjecting these to critique Heartfield strove to paint his boosterism on behalf of agribusiness in a progressive light. His remedies? Export the western model of capitalist agriculture to the rest of the world! Pump in the fertiliser! Pump up the energy inputs! His

slogan? "Plant rapaciously!"

My objections to Heartfield's position fall into three groups. (1) He acts as a booster for powerful social interests of which critical minds should, I think, be mistrustful. These include agribusinesses - to which, two members of the audience informed me after the debate, Spiked is linked in a variety of ways. Exposés of Spiked's links with big business abound on the www - see e.g. gmwatch, nuclearspin. One summary describes how its cadre "lend their polemical talents to promoting GM foods and attacking environmentalists and backing other causes dear to the hearts of the big-spending business groups who attend their forums and functions." Worth mentioning too is that Spiked supporters were behind the utterly discredited shockumentary *The Great Climate Change Swindle*, and have close ties to right-wing libertarian think-tanks and scholars. (2) Heartfield's style of argumentation tends to militate against reasonable debate. That he elevates contrariness into an artform could be admired, if the issues at stake were not so serious. Any 'points scored' in a discussion of this sort by focusing on extreme cases, e.g. the romantic green desire for a return to the medieval idyll, or by cynical asides on Al Gore's electricity bill, are cheap ones, because they derive from a refusal to accept the fact that virtually nobody in the audience actually espoused the 'deep green' position or endorsed Gore's hypocrisy. (3) As regards substantive points, I would single out the following. [a] To champion capitalist agriculture for the fact that it has fed the world is remarkably one-sided. Heartfield completely ignored the extraordinary contradiction involved: that amidst that triumph, billions of human beings remain malnourished. [b] The slogan "plant rapaciously" ignores the fact that the key problem, with regard to malnourishment and famine, is of maldistribution, not underproduction. It also ignores the carbon emissions resulting from deforestation. [c] Given that much of the nutritional content of foodstuffs are shipped to cities and flushed into the sea rather than returned to the land, the application of fertiliser is necessary. But each additional unit applied brings diminishing returns. The faith Heartfield places in fertilisation is justified up to a point, but not to the degree that he believes. In addition, fertiliser production is extremely energy intensive. Until alternatives to fossil fuels are developed, this will impact with devastating consequences on accelerating climate chaos - an issue that Heartfield simply does not understand or acknowledge. [d] The same points apply to the belief that increasing energy inputs offer the solution to raising food production: true up to a point, but we have to understand the problematic consequences. [e] Heartfield's argument that lower investment in production as compared to finance results from the rise of 'green capitalists' is absurd (and idealist). As Ben, a member of the audience, pointed out, it is in fact generated by processes internal to capitalism. [f] Heartfield's attempt to claim that the Green Revolution was driven by the peasants and labourers themselves fell flat. As a member of the audience pointed out, Heartfield should know that its organisation, and the appropriation of profits, was in the hands of agribusiness. [g] The supposition that agribusiness pioneers 'scientific' agriculture is misleading. Firms such as Cargill, Monsanto etc. apply science when it is in their interests, but they form core constituencies of a capitalist framework that prevents the appropriate application of science. Consider by way of illustration Senegal. There the production of cash crops - pushed by agribusiness -- has resulted in severe soil depletion. Research suggests that the traditional agricultural mix of millet, raising cattle and acacia trees could support far greater agricultural production. Acacia trees provide nitrogen to the soil and protein-rich pods for animal feed. Their drought-tolerant roots reach deep into the ground. Their leaves fall before the crop-growing season and do not compete with the millet for sunlight, nutrients or water. Sustainable scientific agriculture would begin by researching into and generalising best practice on the basis of the knowledge of peasants and agricultural scientists. That requires above all education programmes, but throughout the Global South neoliberal reforms (S.A.P.s, etc) have enforced drastic cutbacks in precisely this area.

## **Contribution by Graham Burnett**

Permaculture I feel is an inclusive, positive, solutions based design system which has much to offer regarding how we approach the current food security crisis, as well as inter-related subjects such as Climate Change and Peak Oil. These issues can sometimes cause us to feel confronted by something overwhelmingly huge that we cannot do anything about. The central message that I hoped to get across is that this state of mind is not the place to start from if we want to achieve something, do something or create something. Indeed, by shifting our mind-set we can actually recognise the coming post-cheap oil era as an opportunity rather than a threat, and design the future low carbon age to be thriving, resilient and abundant - somewhere much better to live than our current alienated consumer culture based on greed, war and the myth of perpetual growth.

Unfortunately current pressures on my time and energy, including involvement with helping to set up Transition Town Westcliff ([www.transitionwestcliff.org.uk](http://www.transitionwestcliff.org.uk)), an urban agriculture project in Brixton ( <http://www.flickr.com/photos/transitiontownbrixton/sets/72157603949146874/> ), a local community orchard project ([www.scrumpin.org.uk](http://www.scrumpin.org.uk)) and other initiatives where ordinary people are taking (albeit sometimes faltering) steps towards relocalising their food, energy supplies, economies and culture, mean that I'm not able to make the commitment to engaging in an online debate to the extent that I might like to. Instead, I would like to direct you to an article I wrote for *The Raven* Anarchist Quarterly a couple of years ago which I hope at least clears up some of the misunderstandings around that sometimes slippery word 'permaculture', and might even overlay something useful to the questions being addressed. It can be found at: <http://www.spiralseed.co.uk/raven/>