

Planetary Boundaries: Challenging Environmental Orthodoxies

British Pugwash discussion meeting 6 July 2011

Panel discussion

A lively panel debate followed the presentations, ably chaired by Oliver Morton (The Economist), beginning with brief statements from Craig Bennet (Friends of the Earth), Phil Bloomer (Oxfam), Molly Conisbee (Soil Association), Jim Jepps (Green Party) and Fred Pearce (New Scientist).

Craig Bennet (Friends of the Earth)

I don't recognize Mark's description of the environmental movement. We are comfortable with innovation, modernity and optimism, and we do change our minds (for example, over biofuel). We are hotly debating carbon capture and storage. But we are not happy with your stance on nuclear power - it seems that you have decided that nuclear is good, and have then looked for evidence. Our view is that nuclear cannot scale up fast enough, and there are better solutions which can be scaled up far more swiftly.

Phil Bloomer (Oxfam)

Although our core mission focuses on hunger and disasters, we recognize that there is an urgent need for action to stay within these Planetary Boundaries (PB). It will require innovation in technology but also in global governance, and will depend on international negotiations which are extremely difficult. We see PB as inseparable from the problems of inequality and injustice, including the ongoing land grab in sub-Saharan Africa and elsewhere. We want the World Bank, IMF, and EU to help find a solution, but it will also need active citizenship. It will involve a struggle with massive vested interests.

Molly Conisbee (Soil Association)

As we see it, the difficulties are political, rather than scientific. We don't share Mark's optimistic view on the land use boundary. We do not believe that GM crops have ever sustainably increased the potential of a commercialized crop. However, we recognize that not enough money has been put into GM research.

Jim Jepps (Green Party)

We absolutely agree that there are global limits, which are still not recognized by much of the dominant 'mainstream'. Debate on this whole subject has been too polarized. The discussion on wind power has been unbalanced – the RSPB does not object to wind farms per se, merely to the choice of locations. We would welcome a debate on GM crops, focusing on the specifics. We doubt whether nuclear power can provide a solution world-wide, if only because of uranium shortage, but it may well be relevant to the UK. We think that poverty and inequality really matter.

Fred Pearce (New Scientist)

I believe our panelists are underestimating the challenges at issue. Both of our keynote speakers say things which they know that environmental groups will find it hard to accept.

I believe Mark Lynas is right about nuclear, but he will get into trouble over his stance. I also agree with him about the benefits of urbanization. On the other hand, I agree with our panelists that politics and global governance is at the heart of our environmental problems – you cannot 'depoliticize' them. A fundamental feature of the 'planetary boundaries' approach is the concept that

there is a safe 'living space' within the nine boundaries, not just global limits. The challenges are colossal, but I remain an optimist.

A wide-ranging debate then followed, with particular focus on questions of nuclear power and genetically modified crops. Participants spoke also of the urgent need for government investment in R&D, and for regulatory and tax measures radical enough to address these issues. One contributor spoke of militarism and the world's colossal military expenditure as 'the elephant in the room'.

Conclusions

Towards the close of the discussion, the panelists were each asked to propose specific policies to assist humanity to stay (or return) within planetary boundaries. Their responses included a global carbon market creating financial incentives to reduce carbon emissions; an immediate end to biofuel subsidies; extension of the UK climate change act, as a model also for dealing with the other planetary boundaries; education; and the prohibition of 'land grab' in the developing world.

In his summing up, Professor Rockström reiterated the fundamental nature of the life-support systems for our planet provided by biodiversity. Once these ecological services and regulatory functions, provided by biodiversity, are lost, he said, we have no means of re-creating them. 'They are unsubstitutable'. He listed three final points. First, he suggested that the word 'environment' should be banned. 'It's about *us*: humanity + earth system = the world.' Second, he emphasized that the nation state is an obsolete unit for coping with these planetary-scale problems; and third, that there is a need for a new agricultural revolution. Lynas briefly summarized his own position by saying that we need to 'navigate a third way' between the traditional Green agenda and the 'cornucopian right'.