Agricultural harm and the missed opportunity of Rio+20

Tanya Wyatt considers the environmental and social impacts of Western demands

The purpose of the 'United Nations Conference on Sustainable Development, Rio+20', which took place in June 2012, was to determine 'how to build a green economy to achieve sustainable development and lift people out of poverty; and how to improve international coordination for sustainable development' (UNCSD, 2012). A major part of the green economy and sustainable development is addressing the agricultural practices used globally to feed the more than 7 billion people on Earth. The complex interplay of environmental justice and political and economic interests inherent within the agricultural sector make it a key area of exploration within green criminology. For global health and to reduce the contributors to climate change, it is important to address agriculture as it accounts for 14 per cent of greenhouse gas emissions (IPCC, 2007) and the rearing of livestock adds on additional 18 per cent (WWF, undated).

Though largely undiscussed both at Rio and within the criminological community, the UK's role (and the West's) in this debate is two-fold: the environmental and social harm of consuming certain imports and the UK's own agricultural industry.

Western impact

Understandably Rio's focus in terms of agriculture was on the so-called 'developing' world, as a majority of farming takes place there and a majority of the world's poor are reliant on farming for income and direct sustenance (UNCSD, 2012). But of utmost importance in this discussion is that the Western world places large demands on the developing world for particular crops, which has environmental justice implications. For instance, a recent study links the demand for tea, sugar, chocolate, coffee and bananas to the loss of biodiversity in the global South (Lenzen et al., 2012). Such focused demand has led to the loss of 75 per cent of the biodiversity in crops to where now 90 per cent of calories consumed come from only 30 crops (UNEP, 2007). This has important food security implications in terms of sustainable nutrition and livelihoods, and resilience to diseases, pests, or other events that affect the food supply. Intensive monocultures also arise out of Western demand for soy, palm oil and beef (WWF, undated).

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In addition to biodiversity loss, demand for these crops leads to deforestation, soil erosion, and desertification. There are additional environmental problems, such as pollution, attached to pesticide use (see below) and aquaculture practices in coastal areas and mangrove forests (ibid). Furthermore, agriculture consumes 70 per cent of accessible freshwater, which is more than industry (23 per cent) and domestic use (8 per cent): a high percentage of this is wasted due to leaking pipes, wasteful application methods and forcing crops to grow in areas that they are not suited to them (Clay, 2004). With significant numbers of people having limited access to potable water, this is particularly problematic.

Western and UK diets are linked to environmental destruction in other parts of the world

As the above makes evident, Western and UK diets are linked to environmental destruction in other parts of the world. The environmental destruction has global ramifications in terms of biodiversity loss and climate change, but also has profound consequences to the health and livelihoods of those people living near these areas and those engaged with the industry. Their environments are degraded as a result of the agricultural practices that they adopt in order to meet worldwide demand. Additionally, environmental degradation can force migration to new areas where the cycle of environmental destruction is often repeated. Of further concern is that such environmental injustices disproportionately affect women and the poor.

In the UK

That leads to discussion of the environmental and social harm of the UK's own agricultural sector. The methods used in the UK are not necessarily an example of good practice as they also rely on monocultures, which if infected with disease can lead to food shortages. Additionally, the UK uses and manufactures pesticides and

10.1080/09627251.2012.751214

fertilisers. There has been a 26 fold increase in the use of pesticides since the 1950s. This pollutes rivers, lakes and groundwater. It may kill the 'pests' that destroy human crops, but also kills the beneficial insects that provide essential functions within ecosystems, such as pollination. Pesticides remain within the environment for generations and are now suspected of interfering with hormone messaging systems of wildlife and people. Fertilisers may not build up within the environment in the same way, but they disrupt the oxygen balance within water supplies. This can lead to excessive amounts of some nutrients and result in algae blooms further disrupting the ecosystem (undated).

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While the UK for the most part has a healthy environment and there are campaigns to reduce the use of pesticides and chemicals, with a strong demand for the above mentioned imports and a powerful agro-business sector, there is still environmental and social harm being caused – it is just happening in the developing world. Connected to this is the skewed power dynamics of global trade stemming from the UK and the West dominating supranational bodies like the World Trade Organisation, which gives them an unfair advantage in many markets. Poor farmers in developing nations cannot compete with transnational corporations or challenge the status quo that these powerful actors have set. By and large this means that these farmers are forced into environmentally destructive, chemically intensive practices, in addition to not being paid fairly for the products that they grow or having an equal voice in what they grow (i.e. non genetically modified crops).

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Addressing injustice

Key to reducing the negative impacts, particularly the economic and social ones, is to phase out subsidies in the West that hinder progress towards truly sustainable development. At the same time there needs to be efforts in the UK and elsewhere to protect the rights of the vulnerable, marginalised and poor within the global agricultural industry (UNCSD, 2012).

Sadly, Rio+20 was a missed opportunity for the UK and the world to take significant steps toward a sustainable planet by creating an action plan for the agricultural sector that would protect biodiversity and human rights, reduce toxins and pollutants in the food supply, and challenge the role of transnational agro-businesses in dictating the global diet. Green criminologists should now address the environmental and ecological injustices that such failure has allowed to continue. Much can be done by the field to generate knowledge and raise awareness of the institutionalised harms to people, to the environment and to non-human animals within the agricultural sector. ■

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