11 Rural Land Use in Conflict? Energy and Food in the UK

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Introduction

In recent years global sustainability challenges have often been characterised in terms of the water–energy–food nexus, or sometimes the water–energy–food–climate nexus, and such conceptualisations have been used to emphasise the interlinkages between these natural resources, especially in the context of rising population and increased demand for them (Dodds, 2016). Other examples of nexus thinking have also been used to describe agricultural land use change such as the nexus between population growth and changing diets in the face of increased demand for bioenergy (Alexander et al., 2015). This short chapter focusses on one of the sticking points within the water-energy-food nexus; it considers in general terms the land use conflicts associated with two renewable resources, bioenergy (including biomass, biogas and biofuels) and solar energy (principally groundmounted photovoltaic arrays), in 21st century Britain. Installations developed in order to exploit these resources are sometimes characterised as being at odds with the food supply chain. This paper does not include a consideration of other renewable technologies, which could also lead to land use conflicts between energy and food production, such as wind turbines and hydroelectric projects. Wind energy developments have a limited impact on land use as crops can be grown and livestock can be grazed in their immediate vicinity, although such farming activities could be disrupted during the relatively brief construction phase. Large-scale hydroelectric schemes could certainly have a significant impact on food production as the damming of watercourses necessarily floods land and removes it from