The Effect of Farmer Capacities, Farm Business Resources and Perceived Support of Family, Friends and Associational Networks on Intentions to Invest in Renewable Energy Ventures in the UK

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ABSTRACT

The specific role of farmers and their actual or potential involvement with RE adoption and the wider community is potentially important but has not been addressed by research. This research carried out a postal survey of 2000 (response rate of 20.1%) farmers in the West Midlands region of the UK to investigate some of the factors affecting farmers’ intentions to invest in RE production and associated enterprises. Multivariate linear regressions showed that the farmer’s level of education, level of farm diversification, land tenancy status and farm business turnovers were the most important factors affecting intentions. It also emerged that perceived support of family, friends and associational networks was a significant positive influence on farmer’s investment intentions. The policy implications for these results are discussed.

Keywords: Farm Business, Farmers, Investment Intentions, Renewable Energy, UK

BACKGROUND

Due to declines in traditional agricultural support in the European Union (EU), production and income alternatives for farmers seem necessary (Ilbery et al., 2009). According to Domac et al (2005a) and Domac et al (2005b) renewable energy (RE) production has the potential to contribute towards job creation and farm business growth and sustainability. The government is looking to rural entrepreneurs to contribute towards achieving the country’s energy and...
climate change targets through the adoption of RE enterprises (DECC, 2010a; DECC, 2010b). The RE roadmap lays out governments priorities with regards to the potential contribution of RE to energy security and climate change mitigation and strongly argues that timely investments are needed to ensure that RE effectively contributes towards shielding the country from fossil fuel price fluctuations and reaching the target of 80% reduction in greenhouse gas emissions by 2050 (DECC, 2011b). It is very likely that the eminent review of the Common Agricultural Policy of the EU (CAP) will continue to emphasise the important role of the farm sector in increasing the value of agricultural production to the provision of social welfare services such as rural sustainable development, environmental protection, climate change mitigation and adaptation (Convery et al., 2012).

The ability of farmers to start new activities on farms has been an important area of research within agricultural research (Carter, 1998; Carter, 2001; Chang & Boisvert, 2009; Damianos & Skuras, 1996; Davis et al., 1997; Alsos et al., 2003; Vesala et al., 2007). One major motivation for studies in this area has been to provide understanding of the reasons why farmers start new enterprises in general or why they switch to new enterprises. According to Windle and Rolfe (2005) this type of research is important if policy makers wish to predict the speed of restructuring in industries that have been affected by external or internal pressures. Secondly, such information is necessary to assist policy makers to develop packages to support the restructuring processes and may also assist in the reallocation of resources to support new venture creation processes or to help mitigate negative impacts. Understanding why farmers start new enterprises is relevant if predictions need to be made about the rate of take up (or not) of some technologies (Jones, 2006).

An indication of the extent to which farmers will need to be involved in RE is provided by the UK Government’s Biomass Strategy (DEFRA, 2007). This requires the cultivation of 350,000 hectares of biomass by 2020 from a base area of under 16,000 hectares in 2010 (Sherrington & Moran, 2010). According to Thornley and Cooper (2008) this is unlikely to happen unless there is an appropriate policy framework to enhance deployment. The timeline for the evolution of RE policy in the UK is presented in Table 1. Past research has argued that this framework has tended to change too often creating an uncertain environment for potential investors (Slade et al., 2009).

The specific role of farmers and their actual or potential involvement with RE adoption and the wider community is potentially important but has not been addressed by research (Sherrington et al., 2008; Tranter et al., 2011; Tate & Mbzibain, 2011). The lack of emphasis on the investor’s perspectives is an important shortcoming in extant research (Huijts et al., 2012; Masini & Menichetti 2012; Wüstenhagen & Menichetti, 2012) and the identification of the factors affecting adoption remains relevant to policy makers’ intent on increasing the use of RE in the UK (Sherrington & Moran, 2010).

**Literature Review and Hypotheses**

Farmers’ traits and farm business characteristics influence farm diversification decisions (Anosike & Coughenour, 1990; Bowler et al., 1996). For example, in a study of Swedish farmers, Rosenqvist et al (2000) established that farmers on large estates of between 30 and 60 ha were more likely to grow willows than those with lower farm sizes. It appeared that larger farm enterprises were better able to assess risks and to diversify, and tended to be better informed about the economy and subsidies. The willingness of farmers in the United States to grow energy crops was subject of a study in 2007 (Jensen et al., 2007). This study reported a negative relationship between farmers’ willingness to invest in renewable energy crops and age. Other results indicated that insecure land tenure reduced the tendency to grow perennial crops, higher farm incomes were positively related to willingness to invest in energy crops while there was a net negative relationship of livestock farms revealing a high opportunity cost of converting pasture land. In addition,
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Yi-Lin Jan, Ming-Liang Lin, Ko-Yu Shiao, Chia-Chen Wei, Li-Ting Huang and Quo-Cheng Sung (2012). *International Journal of Technology and Human Interaction* (pp. 31-45).
www.igi-global.com/article/development-evaluation-instrument-green-building/69397?camid=4v1a

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