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Analysis

'Growing your own': A multi-level modelling approach to understanding personal food growing trends and motivations in Europe

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ABSTRACT

Growing food for personal and family consumption is a significant global activity, but one that has received insufficient academic attention, particularly in developed countries. This paper uses data from the European Quality of Life Survey (EQLS) to address three areas of particular concern: the prevalence of growing your own food and how this has changed over time; the individual and household context in which growing takes place; and whether those who grow their own food are happier than those who do not. Results showed that there was a marked increase in growing your own food in Europe, in the period 2003–2007. This increase is largely associated with poorer households and thus, possibly, economic hardship. In the UK however the increase in growing your own food is predominantly associated with older middle class households. Across Europe, whether causal or not, those who grew their own were happier than those who did not. The paper therefore concludes that claims about the gentrification of growing your own may be premature. Despite contrary evidence from the UK, the dominant motive across Europe appears to be primarily economic — to reduce household expenditure whilst ensuring a supply of fresh food.

1. Introduction

Much has been written about the political nature of food security and food growing for personal consumption in developing nations (Altieri and Toledo, 2011; Premat, 2009; Yu and You, 2013). In contrast, until recently relatively little attention has been paid to growing food for personal consumption in domestic or communal spaces in developed countries (Corrigan, 2011). Yet, just as in developing countries, writers and activists have argued that people growing their own food can play an important role in resisting the power of globalised agribusiness and promoting a more socially just and ecologically sustainable world (Nabhan, 2002; McKay, 2011; Ray, 2012; Ravenscroft et al., 2012, 2013). This approach to integrating food growing into urban societies is part of a new food geography that addresses increasing demand for fresh food through sustainable food production, whilst also enhancing food security and sovereignty (Mees and Stone, 2012; Morgan et al., 2006; Wiskerke, 2009; Wiskerke and Viljoen, 2012). It may also promote the health and wellbeing of those involved (Clavin, 2011; Kortright and Wakefield, 2011), particularly if they are elderly or socially vulnerable (Fieldhouse, 2003; Milligan et al., 2004; Sempick et al., 2004, 2005; van den Berg et al., 2010; Wang and MacMillan, 2013).

Despite this increasing interest, there is little published material on the scale and significance of personal food growing in developed countries (see Byrne, 2013, for a review of published studies on community gardens). There is only a limited literature describing how many people are growing their own food in different countries and their socio-economic and demographic characteristics (Draper and Freedman, 2010). There is even less material about how the numbers and types of people growing their own food are changing over time. This paper seeks to address these information gaps by examining the prevalence of growing you own food across Europe, and the characteristics associated with it. It will do so through an analysis of survey data from the 2003 and 2007 waves of the European Quality of Life Survey (EQLS). This survey was conducted across 15 European Union countries and included items on domestic and community food growing, as well as capturing respondents' socio-economic and demographic characteristics.

1.1. The Significance to Participants of Growing Food

The health and wellbeing benefits of food growing can be categorised into: (a) those associated with the *activity* of food growing; (b) those associated with the *output* from the activity; and (c) *externality benefits* that are not directly related to either the activity or the output. In terms of the activity, growing food involves physical exercise which confers

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health benefits on most people (Wakefield et al., 2007); particularly the elderly (van den Berg et al., 2010; Wang and MacMillan, 2013). The contribution of food growing to the personal independence of older or vulnerable people has also been noted (Fieldhouse, 2003; Milligan et al., 2004; Sempick et al., 2004, 2005) and Crouch and Ward (1999) argued that food growing on allotments had a wide variety of individual and communal benefits including self-fulfilment, identity affirmation, self help and mutual support. In terms of the produce which is the output of food growing, food safety (National Gardening Association, 2009) and better tasting, higher quality food (Kortright and Wakefield, 2011; National Gardening Association, 2009; Wakefield et al., 2007) may be important in terms of the health benefits that they confer (Wakefield et al., 2007; van den Berg et al., 2010).

Finally, there are a number of benefits that may be derived from the practice of growing food. These include better eating habits (Litt et al., 2011), the satisfaction of growing, eating and sharing self-grown food (Tomkins, 2014), and providing people with space to be alone (Clavin, 2011), or to be with others (Clavin, 2011; Kortright and Wakefield, 2011; Middling et al., 2011; National Gardening Association, 2009), and to spend time outdoors (Kingsley et al., 2009; National Gardening Association, 2009). Such benefits may vary socially and by ethnicity with a number of qualitative studies finding that lower income groups (Pudup, 2008) and people from ethnic minorities (Shinew et al., 2004) value food growing sites for the opportunity to build social interaction and community cohesion. Furthermore, qualitative research indicates that the techniques used to grow food vary by ethnicity allowing growers from particular ethic groups to feel engaged with distinct cultural traditions (Buckingham, 2005). There is also the potential for education and skill development through the activity of food growing (Clavin, 2011; Kortright and Wakefield, 2011) and some qualitative or small sample studies argue that skill development linked to food growing can be most pronounced amongst children (Kortright and Wakefield, 2011; National Gardening Association, 2009) and older or vulnerable people (Duchemin et al., 2008; Fieldhouse, 2003; Sempick et al., 2004, 2005). Similar to the health and wellbeing conferred by food growing, these benefits need not directly impinge on the activity or what it produces; it can provide a medium for teaching and learning about the natural world beyond the food being grown for personal consumption (Kortright and Wakefield, 2011).

The forgoing benefits are centred on people but the potential for food growing to ameliorate environmental impacts also emerges in a number of studies (see, for example, Okvat and Zautra, 2011). The benefit of environmental sustainability is noted by Kortright and Wakefield (2011) who identified gardeners who "grew food primarily to reduce their ecological footprint" (p. 45). Living 'locally' and upholding traditional production methods (National Gardening Association, 2009) are also benefits with an environmental dimension. Research into organic food purchasing indicates how choices around food and how it is grown are also influenced by environmental values and attitudes (Aertsens et al., 2009).

There is also an economic dimension to growing food, with over half of the National Gardening Association's (2009) respondents listing this as a significant reason to grow food. Indeed, it was the second most popular reason for growing their own, after wanting better tasting food. In their smaller scale study, Wakefield et al noted how:

> Most participants spoke of improved food access and cost-saving in some way. In some cases, substituting garden-grown produce for store-bought foods was seen to make a significant difference in household food costs.
>
> [Wakefield et al., 2007, p. 97]

In addition to saving money, the economic benefits of food growing have sometimes been framed in terms of food security (e.g. Duchemin et al., 2008). In their review of the literature on community gardens, Guitart et al. (2012) note a discrepancy between observations about saving money, which are numerous, and explicit quantification of how much money is saved. This discrepancy, interesting in its own terms, becomes more important when considered in the context of the long-time reliance placed on these spaces by some people to provide food in times of economic crisis (Pudup, 2008).

Although rarely reflected upon in the literature it is of course possible that there are costs/disadvantages associated with growing your own food. In the context of allotments, Crouch (2003, p. 3) notes how "[t]hey can be haunting, uncomfortable places too: negative and unsettling". Whilst in the context of community gardening, Okvat and Zautra (2011) reflect on the formation of in-groups leading to the exclusion of certain people. Methodologies for the collection of primary data about the benefits of food growing could, in future, pay more attention to the consideration and thus documentation of costs / disadvantages in order that a more complete story is told. Indeed, this could serve the purposes of food growing proponents if explicit and transparent consideration of negativities concludes that they are both minor and uncommonly experienced.

1.2. The Scale of Personal Food Growing

Whilst claims about the benefits of 'growing your own' abound, there is less information about the scale of food growing activity, although assertions have been made recently that there has been a significant increase in numbers of people growing their own food in countries such as the UK and the USA (Ray, 2012; Horticultural Trade Association, 2010). These were supported an American study suggesting that 31% of households surveyed identified themselves as people who grew their own food (The National Gardening Association, 2009). The National Gardening Association (2009) suggested that this was likely to rise considerably, with a further 6% of respondents reporting that they planned to grow some of their own food in the coming year. Although there were no sizeable gender differences, nor any clear income patterns, the food growers in this study tended to be well educated and married without children. Unfortunately, similar data were not presented for the respondents who did not grow their own food, meaning that no comparisons can be undertaken.

Three overarching reports describe the European Quality of Life Survey (EQLS), with Alber et al. (2004) reporting the first wave of data collected in 2003, and Anderson et al. (2009, 2012) reporting the second wave (2007) and third wave (2012). Only the first and second waves included questions on food growing. The two relevant studies (Alber et al., 2004; Anderson et al., 2009) illustrated a number of differences in food growing, for four different country groups,[1] in terms of the income quartile of respondents and urban versus rural dwellers. Across all country groups, both analyses illustrated an inverse relationship between income and food growing. People in rural areas were also more likely to grow their own food compared to their urban counterparts. Large differences in food growing patterns were also observed between country groups. For example, candidate countries and, particularly, new member states had higher proportions (usually above 25%) of their populations involved in this activity compared to EU15 and EU25/27 countries, where between 5% and 20% of the population were usually involved in food growing.[2] This suggests that there is geography to personal food growing at the European scale which needs to be understood more fully. However, there is no discussion in

[1] In Alber et al. (2004) EU15, EU25, NMS10 (10 new member states which joined the EU in 2004) and CC3 (candidate countries Bulgaria, Romania and Turkey). In Anderson et al. (2009) EU15, EU27, NMS12 (12 new member states, 10 of which joined the EU in May 2004, plus Bulgaria and Romania which joined in 2007) and CC3 (candidate countries Croatia, Former Yugoslav Republic of Macedonia and Turkey).

[2] Broadly, the (reported) higher prevalence of food growing in America compared to most countries in Europe could be a function of relative-to-income land and house prices which affect whether people have/can afford outdoor food growing space (Davies, 2009; The Economist, 2014).