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Living a One Planet Life: Experiences and Perceptions of the One Planet Development Policy



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Submitted to Swansea University in fulfilment of the requirements for the Degree of MSc by Research (Social Theory and Space)

Swansea University, Year of Submission: 2022

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In 2010, the One Planet Development policy (OPD) was introduced as part of the Welsh Government's wider vision to create a sustainable One Planet nation that only uses its fair share of resources. Specifically, OPD is a planning policy which allows people to build a home and create a land-based business in rural areas where developments are normally prohibited, provided that a strict set of ecologically orientated criteria are met, including having an ecological footprint as small as possible. To investigate how such OPD is being practised, semi-structured interviews and participant observation were utilised to explore areas that remain generally under-researched, such as the everyday lives, motivations, experiences and perceptions of those attempting to live One Planet Lives, whilst also placing these in the context of thoughts and issues raised by a range of other stakeholders, such as planners, local councillors and the Welsh Government. OPD participants were found to be fully committed to living low impact lifestyles. They were motivated by political reasons and general concern for the environment but also by more personal reasons, such as wanting to be immersed in nature. Despite being happy in their lifestyle, the planning application stage and ongoing monitoring was seen as daunting and at times traumatic. It was also shown to be problematic and a burden for resource depleted local planning departments, serving to compound issues surrounding OPD. Indeed, tension has been generated by the different visions and meanings being projected onto the rural landscape, a key characteristic of the emerging post-productivist countryside and a sign of enduring crisis for rural space. Wales's association with alternative living also permeated the study's findings, along with wider issues shaping the current complexion of rural areas, such the pressure on conventional agriculture, general uncertainty for farmers and often an ongoing productivist mindset. These all fed into the debates surrounding OPD, curtailing its progress, frustrating meaningful understanding of OPD successes and limiting the possibility of applying lessons learned to other areas of policy. The study thus concludes by calling on the Welsh Government to review the policy to gain a first-hand understating of the issues and rework and re-emphasise the potential opportunities OPD offers.

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Contents

Acknowledgments	5
Poem	5
List of Figures	7
List of Tables	8
Abbreviations	
Chapter 1: Introduction10	
Chapter 2: Literature Review1	
Chapter 3: Methodology	
Chapter 4: Introducing OPD48	
Chapter 5: Living the One Planet Life59)
Chapter 6: One Planet Development from the Outside10	
Chapter 7: Further Discussion & Conclusion12	
References	
Appendices14	9

As with a project of this nature, it would not be possible without its contributors. To all those that participated that are seeking more sustainable ways of living, I can only wish you well on your life affirming journeys, and I hope to cross paths with you again. A massive thank you for providing your time and hospitality. A special thanks to Erica Thompson and her family of Dan y Berllan OPD and the One Planet Council, for her time and patience in helping contact potential participants, and for welcoming me into their home and lives. Thank you to all the councillors, farmers, planners, consultants and former politicians that were more than happy to talk at length about their experience of the policy and provide their thoughts on the state of play.

To all my family that were just as eager to find out more about one planet living, especially my partner Anna, for her love and endless encouragement. Last but certainly not least, to my supervisor Keith Halfacree, for his unwavering support and enthusiasm for discovering the intricacies of rural life. Your time and kindness are very much appreciated.

I will wait here in the fields to see how well the rain brings on the grass. In the labor of the fields longer than a man's life I am home. Don't come with me. You stay home too.

I will be standing in the woods where the old trees move only with the wind and then with gravity. In the stillness of the trees I am at home. Don't come with me. You stay home too.

Wendell Berry

Figure 1. 'Conventional looking': Dan Y Berllan OPD has a lime plastered exterior with local larch cladding, large solar arrays cover most of the roof to maximise energy production.

Figure 2. Raised beds help the family reach their target of producing at least 30% of food from the site, although they far exceed this.

Figure 3. The polytunnels in late September is still producing lots of fruit and vegetables, winter salads are grown to supplement stored foods.

Figure 4. An outbuilding with more Solar Panels, rainwater harvesting, and water storage tank. Water pressure is created using the natural gradient of the land.

Figure 5. A reed bed system, visible to the left of the home filters grey water. An electric bike seen in the foreground is used to take their children to school.

Figure 6. Honey and Apple Juice produced by Dan y Berllan, with the OPD produce sticker demonstrating the low ecological footprint associated with the products.

Figure 7. Late Summer. The trees planted are begging to grow, the house currently being developed can be seen nestled near the bottom of the land.

Figure 8. The participants say the house is partly based on a Welsh longhouse and is simple and modest it its design. It is still under construction but is beginning to take shape. It is lifted off the ground to limit the amount of concrete needed as footings, and to ensure it stays dry. The cladding is already fading in the weather, helping it blend in.

Figure 9. The polytunnels ensure optimum growing conditions enabling the residents to produce over a longer period and increase the diversity of products they can grow. A hazel hedge planted around the fenced off area will eventually screen the polytunnels from view and provide further shelter for the outside growing space.

Figure 10. Some produce growing on former grazing land; Shallots ready to be sent out to customers; Onions being dried.

Figure 11. The outdoor growing space with a wide variety of produce including runner beans, beetroot, chard, squashes and courgettes. The polytunnels have been positioned to maximise shelter for the rest of the growing area.

Figure 12. Late March. Coed Talylan is quite secluded, the growing area is in the foreground.

Figure 13. A yurt being used for temporary accommodation.

Figure 14. Various mushrooms cultivated at Coed Talylan.

Figure 15. Volunteers inoculate logs with mycelium. Logs are thrown into the cold stream to 'shock' them to produce mushrooms.

List of Tables

Table 1: OPD participants in the research - Case Studies

Table 2: Other OPD participants in the research.

Table 3: Stakeholder participants in the research.

- BTTL: Back to the Land
- CAP: Common Agricultural Policy
- CCC: Carmarthenshire County Council
- CSA: Community Supported Agriculture
- EF: Ecological Footprint
- LDP: Local Development Plan
- LID: Low Impact Development
- NFU: National Farmers Union
- NRW: Natural Resources Wales
- **OPD: One Planet Development**
- OPC: One Planet Council
- **RED:** Rural Enterprise Dwelling
- TAN: Technical Advice Note
- WG: Welsh Government

In 2009 the Welsh Government released the One Wales: One Planet document setting out the rather radical vision for a sustainable Wales and an ambitious goal to make the country a One Planet nation that would use only its fair share of resources (Welsh Assembly Government, 2009). The document highlighted that the county's ecological footprint was equivalent to 2.7 planets' worth of resources, with climate change being proof of the effect of unsustainable lifestyles (Welsh Assembly Government, 2009). Wales is rather unique in this respect, and in the company of just a handful of countries which have made the promotion of sustainable development a statutory duty, a duty that permeates all decision making and policy aims (Welsh Assembly Government, 2009). Stemming from these goals, in 2010 the One Planet Development Policy (OPD) was announced via Technical Advice Note 6: Planning for Sustainable Rural Communities (Welsh Assembly Government, 2010), a planning policy allowing homes to be built in the open countryside as an exception to the Local Development Plan (LDP) because of the nature of the building itself, being zero carbon in construction and use, and the behaviour and consumption of the residents being constrained within one planets' worth of resources (Welsh Assembly Government, 2010). Those pursuing OPD would be required to meet a demanding set of criteria including creating a land based business to secure their minimum needs, as well as increasing biodiversity amongst other goals. The policy has now been in place for over a decade, with a total of around forty known OPDs approved (One Planet Council, n.d).

Though the facts surrounding climate change have been well-established for a considerable amount of time (IPCC, 2022), during the lifetime of the OPD policy, public awareness of climate change and the need for more sustainable ways of living have steadily increased, (YouGov. n.d.). Ever-growing warnings of Intergovernmental Panel on Climate Change (IPCC) reports (Harvey, 2022), the rise of direct-action protestors, such as Extinction Rebellion, Insulate Britain and Just Stop Oil (Badshah, 2022) grabbing headlines for disrupting the public to increase awareness, along with the emergence of public figures like Greta Thunberg calling attention to issues surrounding climate change have served to push concerns regarding the environment to the top of the agenda in many countries, with the environment being consistently in

the UK top five for the most important issues facing the country (YouGov. n.d.). This has resulted in the declaration of a 'Climate Emergency' by many councils and governments in the UK including the Welsh Government (WG) (Welsh Government, 2019).

The OPD policy can be seen as one path towards sustainable living, that contributes to lower emissions due to the low carbon nature of the lifestyle involved, and the improvement of natural habitats, and rural regeneration in general, as it has the potential to re-introduce smallholding techniques and families back into the countryside. OPD is now playing out amongst the uncertainty surrounding Brexit and the forthcoming changes to farming subsidies, along with memory of the turbulence of the pandemic and its associated effect on supply lines and access to goods, and now the cost-of-living crisis. Given the time that has elapsed since the policy's inception, the increased need to learn from experiments in sustainable living and apply these to other areas of policy, it is both necessary and timely to interrogate the reality of OPD from a range of perspectives. This thesis aims to explore the experience of those living under the policy, as well as the perceptions and feelings of those external to it. It seeks to address the lack of research on OPD to date, by casting a wide net and aspiring to give an in-depth overview of the experiences surrounding it.

This thesis first contemplates the literature on relevant themes and topics, building a broad overview of the context OPD is situated in such as the how the countryside is conceptualised, from productivism to post-productivism, before considering the radical rurals that have emerged and the literature on OPD to date. It then outlines the mixed methods adopted in this qualitative study such as interview and participant observation, outlining the twenty-eight interviews that forms the basis of the research. It then comprises of three empirical chapters, with chapter four establishing the history and content of the OPD policy, as well as further context. Chapter five then utilises three case studies and three further interviews with OPD participants and considers those living the one planet life, contemplating their motivations, thoughts and experiences, as well as giving an impression of what OPD looks like in reality, as well as daily life. Chapter six explores the views and perceptions of those outside of OPD, including planning authorities, councillors, farmers and other notable figures, to provide further analysis of the issues surrounding OPD. The thesis will aim to fill the gap in the literature so far, given the lack of work on the progress of policy and the

experience of those participating in it, by engaging with OPD at this moment in time, to discover what is happening on the ground.

Introduction

Given the multi-faceted nature of the OPD policy and the broad questions asked in this research, it is necessary in reviewing the existing literature to cover a considerable amount of ground to provide the necessary context in which the policy operates, situate the experience of it and how it is shaped by those external to it. As such, a general outline of the changing trajectory of farming during the Second World War and the post-war period is necessary and consequently the impact on the countryside. This impact was not just physical, as a result of changing practices in agriculture and planning legislation, but also, perhaps even more importantly, in terms of our conception of the countryside and its purpose. This requires an overview of the gradual breaking down of the countryside dominated by agriculture, the era of 'productivism' towards the so-called 'post-productivist' period, as challenges such as counterurbanization and an increasing diversity of people living in the countryside accelerated change, allowing a re-imagining of rural space, precipitating the need to revisit it academically. It is essential to establish this context if we are to fully appreciate contemporary held opinions and visions, and the influence these views have upon the overall experience of OPD in Wales today.

Following this broad introduction, work on efforts of living differently and sustainably will then be considered and the limitations and difficulties of these approaches, such as the 'back to the land' movement, the role of intentional communities and their increasingly environmental agenda, as well as low impact developments. These set the scene for the possibility of further experimentation in rural areas and create the potential for mainstreaming alternative ideas. Narrowing the focus to Wales and its alleged amenability to the alternative, recent research of the eco-village projects that have germinated, particularly in west Wales, as predecessors of the OPD policy are considered. Finally, this literature review will contemplate the studies that have just began to unravel the complexities of living One Planet lives and how this research aims to create a more holistic understanding of these 'realities' of living under the OPD policy from a range of perspectives.

From Productivism to Post-Productivism

The Second World War provides a convenient point as a watershed moment given the raft of policies seen post-war regarding agriculture, planning and uses of the countryside such as recreation and conservation (Winter, 2000). Needing to increase domestic food production during the war, after relying heavily on imports, the state directed a ploughing up campaign for farmers to expand the land suitable for arable agriculture (Martin & Langthaler, 2012) and with it a 'much more robust structure of agricultural support' (Murdoch, 2005, p. 173). Coupled with this was the increased presence of the National Farmers Union (NFU) in policy debates and in the shaping of a post-war plan for agriculture, a role that had been amplified by its key role in the war effort (Winter, 2000). The gross output of agriculture in Britain quickly increased by two thirds from 1938-1939 to 1941-42 and as such farmers were in line for a generous post-war settlement given their input in the war effort (Bowers, 1985). With the success of the Dig for Victory Campaign reducing Britain's need for food imports, farming enjoyed widespread public support, and farmers were seen as a key part of the people's war (Howkins, 2003; Smith, 2013).

Against the background of wartime conditions and the importance of food security (Hodge, 1999), The Scott Committee Report of 1942 on Land Utilization in Rural Areas is often cited as one of the key wartime reports that provided a baseline for the post-war British countryside, along with the Barlow (1940) and Uthwatt (1942) reports calling for the protection of agricultural land (Bishop & Phillips, 2004; Sheail, 2007). The report refers to aimless developments that had spread into rural areas, the threat of the urban; a 'formless sprawl' with the 'ribboning of the approach roads', also making the point that 'contrary to popular belief, large-scale planning is by no means new-it has simply been forgotten in the past century' (Stamp, 1943, pp. 16-17). 'Farmers, foresters and landowners' are seen as the guardians of the countryside and rather romantically the 'nation's landscape gardeners', needed to secure productive land without which 'the country would rapidly become, first a tangle of brambles or scrub and later woods' (Stamp, 1943, pp. 16-17). While the report also criticised the Town and Country Planning Act of 1932, as having an acute 'urban angle', with agriculture being largely omitted, an issue which needed to be addressed (Stamp, 1943, pp. 16-17). Also feeding into these worries was the expanding Plotland movement, largely self-built bungalows and chalets that had proliferated, especially during the 1930s as means for the working class to escape the city and into the fresh air of the countryside and the coastal southeast (Hardy &Ward, 2004)

The deficiencies of the 1932 Act, led to the Town and Country Planning Act of 1947, which protected farmland, curtailed urban encroachment and 'imposed minimal controls on agricultural and forestry enterprises', meaning that agricultural buildings were permitted developments (Bishop & Phillips, 2004, p.41). The ability to curtail any new developments and also re-introduce order, speaks of both the necessity to prevent unsustainable amounts of residential developments in the countryside and also a new form of enclosure. The tenets of the 1947 Act was based on a strong and clear vision of the purpose of the countryside and what needed to be achieved to realize it (Bishop & Phillips, 2004, pp.39-40). This led to what has been termed as the 'productivist regime' (Murdoch, 2005, p. 173), 'a commitment to an intensive, industrially driven and expansionist agriculture with state support based primarily on output and increased productivity' (Marsden et al., 1993, p. 221). The post-war policies of the Labour government reflected this strong consensus that had emerged, that agriculture was to be protected and championed (Winter, 2000). The 1947 Agriculture Act normalized the system and organization seen during the war (Marsden et al., 1993):

the purpose of promoting and maintaining...a stable and efficient agricultural industry capable of producing such part of the nation's food and other agricultural produce as in the national interest it is desirable to produce in the United Kingdom, and of producing it at minimum prices consistently with proper remuneration and living conditions for farmers and workers in agriculture and an adequate return on capital invested in the industry. (The Agriculture Act, 1947).

Such was the pervasiveness of this productivism it can been seen as 'shorthand for rurality from 1945 until 1980' (Halfacree, 2006a, p. 311). Conceptualizations of productivism and its domination of the post-war period until the 1980s are generally agreed upon in the literature, differing only in terms of what elements are emphasized and minor variations on when it ended, as well as the timing of the real change seen on the ground so to speak, in terms of more mechanized and industrialised methods farming, with some citing the 1950s and 60s as a period of marked change (Howkins, 2003; Wilson, 2001).

Despite the dominance of the productivist countryside in this period, there was a growing sense of concern for the environment starting in the1960s especially stemming from Rachel Carson's Silent Spring (1962), with its criticism of pesticides and modern methods of farming (Howkins, 2003). It also worth noting the influence of Schumacher's (1988) critique of mainstream capitalism, Small is Beautiful originally published in 1973, coinciding with the oil crisis. As well as these environmental and food quality concerns, Marsden et al. (1993) in their seminal book, Constructing the Countryside have outlined further contradictions of the Atlanticist food order during the 1980s, with the onset of trade wars, increasing political tensions surrounding the Common Agricultural Policy of the EC, and its reform, and the cost of subsidies to the state. These issues had been simmering for some time but had been effectively masked, with farmers being supported through agricultural policy and protected by planning policy (Marsden et al., 1993). There was also an introduction of milk quotas on a European level (Walford et al., 1999).

Surpluses followed by decreasing commodity prices against the backdrop of globalization, with scant attention to the environment, ensured that the overarching focus on production became contested (Bowers & Cheshire, 1983). Despite this, Marsden et al. (1993) argue that the power of landowners and farming remained to certain degree, the case made against agricultural subsidies tempered by 'farm diversification' and 'novel uses for rural land' (such as tourism), giving a sheen of innovation and thereby sustaining a productivist image, at least on a temporary basis (Marsden et al., 1993, p. 68). They also cite environmental policy emphasizing the possible issue of neglected and derelict land and playing up to the image of the farmer as a steward of the land (Marsden et al., 1993). These changes and challenges in the countryside such as agricultural restructuring (economic), changing demographic through counter-urbanisation with associated loss of services (social), the environmental question (political) engendered a swell of rural research in the early 1990s concerned with the uncertainty as to 'where' the countryside was heading (Bosworth & Somerville, 2014).

Marsden et al. (1993) contribution can be seen as the start of the debate regarding the supposed move towards a post-productivist countryside among others (Shucksmith, 1993), they recognised a '...complex assemblage of economic, social and political elements' operating at all levels (local, regional, national and international) and

articulated four 'ideal types' within the emergence of a differentiated countryside, the 'preserved', the 'contested', the 'paternalistic' and the 'clientelist' countryside (Marsden et al., 1993, pp. 187-190). They shaped these tendencies around existing norms and structures that would govern behaviour and stressed the patchiness in which these may form in relation to a set of four parameters (economic, social, political and cultural) to essentially model potential outcomes and trajectories (Marsden et al., 1993, p. 186). To give an example, the 'Preserved countryside' was defined as areas in English lowlands and accessible uplands where local decision-making would coalesce around preservation due to their beauty. Reconstruction here would be 'highly contested' due to middle-class residents and 'articulate consumption interests' (Marsden et al., 1993, p. 188). The upshot being that understanding the rural was set to become far more multifaceted, complicated and 'messy', with interplay between these elements resulting in a range of outcomes (Marsden et al., 1993, p.191)

Cloke and Goodwin (1992) also outlined the various challenges in the countryside or what they term 'new structured coherences' that have started to replace agricultural production, such as economic restructuring in terms of the tapping into the rural workforce by the service industry and the burgeoning IT sector, the commodification of rural areas in the form or recreation, leisure and tourism and changes to the rural population through in-migration. Of note here is in-migration's association with the notion of the rural idyll, perhaps conventionally associated with the bucolic images of small-scale farms, community and picturesque scenes which has been subject of a vigorous discourse on how it informs our image of the countryside (Bunce, 2003). Speaking of the power of this vision, Bunce (1994) proclaimed that:

As the modern western urban-industrial system has tightened its grip on life and landscape, sentiment towards the countryside seems to have reached idealistic proportions acquiring almost mythological status in our mental view of the world and at the same time becoming increasingly valued as a tangible alternative to urban life. (Bunce, 1994, p. 1).

Although perhaps overstating the case slightly for effect, Bunce (1994) underlines the pervasiveness of the images we project upon the countryside. Although Bell (1997) warns of seeing these visions as sort of immovable and all-encompassing nostalgia, Cloke and Goodwin (1992) do contemplate the different visions of those coming to live in rural places and touch on the potential this has for conflict, pinpointing that new

inhabitants may have 'socially-produced, 'sanitised' and 'commodified' versions of the rural idyll in contrast to the more 'realistic' and practical version by those that have lived there longer, while also observing culture and language concerns in rural Wales (Cloke & Goodwin, 1992, p. 331).

Again, this sense of a fragmentation permeates their warning for the need of a more nuanced understanding of how the issues they identify play out, highlighting that changes in rural areas are 'socially constructed process[es]' with wide-ranging differences from place to place as they pursue different avenues and as production and consumption run alongside one another (Cloke & Goodwin, 1992, p. 334).

Halfacree (1999) recognizes a rurality with a richer diversity of inhabitants and stakeholders, and identifies a strand of 'radical ruralities' hidden within the catch all term of counter-urbanisation. He cites 'The Land is Ours' campaign, taking place in 1995, when a group of activists set up a functioning community on a neglected patch of land in Surrey which had once been used by the Diggers of the seventeenth century (Halfacree, 1999). |Halfacree (1999) sees the event as symbolic of the 'crisis of productivism', a recognition of the gradual 'breaking down' of the regime that had been 'hegemonic' (Halfacree, 1999, p. 68). Thus, giving rise to an opportunity to reimagine the countryside, '...to create a rurality in their image', although unlikely to succeed, at least able to express their vision, to re-conceptualize in a newly created 'conceptual space', suggesting a move towards post-productivism and 'a search for a new way of understanding the countryside' (Halfacree, 1999, pp. 68-69).

Halfacree (1999) harnesses Lefebvre's conception of space and his three key dimensions and applies Harvey's (1985) concept of 'structured coherence', meaning that the triad of space; spatial practices, representations of space and representational spaces, remain stable over time, such as in the experience of productivism (Halfacree, 1999, p.71). Halfacree (1999) posits that post-productivism represents a change to a different kind of structured coherence and broadly outlines three alternative futures for the countryside, the first two being 'super-productivism'; industrial agribusiness and the 'rural idyll', both of which fall within the same physical space created by productivism and which will likely conform to the capitalist notion of space and how that manifest in place (Halfacree, 1999, pp. 71-72). The third is a radical vision, exemplified by 'The Land is Ours' campaign, which questions capitalism itself and

calls for a complete reconfiguration, a vision unlikely to take root 'without considerable physical, ideological and political struggle' (Halfacree, 1999, p. 75).

If the dominant form of rurality was under pressure by the 1990s, it was in crisis by the beginning of the millennium. Howkins (2003) has outlined the material and ideological crisis brought about by fears of BSE and Foot and Mouth Disease, the issue of food quality as a result of overly industrialized factory farming and the damage this was perceived to have had on the environment (Howkins, 2003, p.1). This shift in public perception and opinion towards farming has been well documented in the literature (Howkins, 2003). This further served to challenge the predominance of agriculture and calls for a re-imagining of the future of rural Britain, captured by such book titles as Sissons' (2001) 'A Countryside for All' such that by the mid 2000s, the consensus of the post-war period attitude to the countryside had broken down even further with notions of "agricultural fundamentalism" potentially consigned to history' (Bishop & Phillips, 2004).

Focusing especially on the English perspective, Lowe et al. (2003) have expanded on this idea of the differentiated countryside outlined by Marsden et al. (1993), looking at two competing narratives, namely pastoralism and modernism, and how they have shaped the way we perceive the countryside and as a result our actions in relation to it. Pastoralism is associated with a middle class 'pre-industrial' idea of the countryside, valuing the qualities it is perceived to have, such as community and tradition, while the opposing view; modernism, sees this as backwards and the need for the countryside to merge with industrial society (Murdoch et al., 2003, p. 2). They situate these contrasting views held by rural inhabitants, within the wider changes taking place, such as the diminishing economic contribution of agriculture and its effect on rural jobs, the increasing middle class demographic present in the countryside and its effect on the availability and cost of housing, ultimately 'allowing [the countryside] to be revalued as an aesthetic or environmental space', with the potential this has for conflict and tension (Murdoch et al., 2003, p. 4). Considerable variation is found in how this plays out, with a range of factors producing a 'number of increasingly distinct rural spaces' (Murdoch et al., 2003, p. 31), also arguing that a national picture of the countryside and how it develops has transitioned to a situation whereby regional and local components are more apparent and play a much greater role, a comparison between the more prosperous South East and the poorer North East of England for

example (Murdoch et al., 2003). This shift to regionalization in terms of the trajectory of development is also encapsulated by the series of White Papers prepared during the 1990s on each country of the UK separately, the difference in emphasis in Wales; the need to sustain rural communities both culturally and economically, while England's document focused on the countryside as a 'national asset' and the need to square environmental objectives with economic goals (Lowe, 1997, p.390).

The positive connotations and feeling towards the countryside and rural life more generally, also crosses into Wales. While the imagery and ideals of the countryside might indeed be more wrapped up in Englishness (Bunce, 1994), the sentiments towards rural Wales are also very strong as it cradles the concerns of the erosion of Welsh identity and the future of the Welsh language, particularly with concern for people moving into rural Wales (Day, 2011, p. 23). Recognizing the diminishing role of agriculture in Wales and its knock-on effect on jobs and its potential wider impact on rural life, calls to experiment and differentiate from England rather than adopt English practice, can be seen in the literature (Midmore & Hughes, 1996). Specific local circumstances are seen as opportunities to implement new policies, to create alternative incomes that could see rural Wales become an 'exemplar' for the rest of Europe, with 'greater self-reliance'. (Midmore & Hughes, 1996, pp.2-4). There is a sense of Wales' uniqueness and potential to take a different approach.

What is quite clear from the literature is this sense that rural change is gathering pace, within the UK and in the Global North in general into this more regionalized arrangement and what Halfacree has termed a 'multifunctional rural regime' (Halfacree, 2006b, p. 311). Although it cannot be explored in detail here, in a wider context, the concept of post-productivism is UK centric in its origin (Boyle & Halfacree, 1998). Important to note however is Ilbery and Bowler's (1998) point that a post-productivist countryside co-exists alongside productivist farming and has not been superseded, especially given that by land use agriculture remains dominant, although its influence and economic importance will vary depending on location (Boyle & Halfacree, 1998). Rural change means farms deviate along different pathways, for example, towards agri-business, creating news forms of income alongside farming (Boyle & Halfacree, 1998).

Radical Rurals

It is to notions of sustainability and alternative living that we must now turn, backtracking to the advent of countercultural ideas and the rural dimension of the sort of initiatives and communities that were created. Engaging with the consensus that a change in attitude had emerged between the pre-war and post-war generations coalescing in the counterculture of the 1960s/70s and a 'shared concern on the part of its participants to transform their own lives and that of straight society, to create an alternative social order', Rigby analyzed the commune movement in the UK (including Postlip Hall, Shrubb Farm and the Findhorn Centre of Light), intentional communities some of which were in rural locations, trialing different forms of living and working, and their potential (Rigby, 1974, p. 1). Although the study can be seen as somewhat dated, notwithstanding the longevity of some of the communes explored, what is of particular interest is their rural aspirations, their setting in the countryside and their potential as sites for creating space for further experimentation (Halfacree, 2006b, p. 315). The sheer variety of the commune scene and their changing nature over time as they responded to tensions and differences despite overlapping similarities, are key themes identified (Rigby, 1974, p. 136). It also reflects the diversity of those living and working in the countryside going beyond the mass media and public perception of a 'single type' of 'young, long-haired, drug-using artists and freaks 'doing their thing' in squalor out in the countryside' (Rigby, 1974, p. 139). The intentional communities of this period, are essentially a product of their time, despite emerging concerns with the environment, they are responses to capitalist society and the rat-race, a way out of conventional, consumerist lifestyle but undoubtedly serve as inspiration as Rigby summarises: 'The potential of this movement lies in the fact that through putting their bodies on the line, so to speak, through putting their ideals and beliefs into living practice, they can provide the spark to light the dreams of others...' (Rigby, 1974, p. 148).

Revisiting this work on communal living, David Pepper's Communes and the Green Vision (1991) reacts to a perceived lack of literature on practical ways of responding to environmental concerns, bemoaning the considerable output since Silent Spring that has focused primarily on technicalities, causes and extent of these issues. Analyzing a dozen communes from a 'green' perspective, the aim of the book is to establish the degree to which they are ecological, and if so, how and to what degree in terms of

'attitudes, values and deeds' rather than through a statistical analysis (Pepper, 1991, p. 2). This then feeds into a wider narrative on whether communes could be a part of a way towards a more socially just and ecological society, what has been termed an 'Ecotopia' (Pepper 1991, p.2).

Looking to Rigby's (1974) and Abrams and McCulloch's (1976) assessment of communes, discussed earlier, Pepper observes that 'Sixties communes were often compatible with green values, the green critique of conventional society, and green views about social relations' however overall did not suggest a primary concern regarding the environment, rather they were green by virtue of their lifestyle, almost by accident (Pepper, 1991, p. 32). While reasoning that contemporary communards may indeed be more centrally governed by environmental concerns because of their growing profile, their initial aims are gradually tamed over time citing Glaneirw's selfsufficiency aim which had 'now become a more distant ideal because in practicing it, they 'could not meet the bills' (Pepper, 1991, p. 199). This is attributed to conventional society's ability to insidiously re-integrate the 'alternative' back into its sphere through increased individualism, loss of collectivity and a lack of energy (Pepper, 1991, p. 199). Other more recent studies on alternative living such as Schwarz & Schwarz's 1998 book, 'Living Lightly: Travels in Post-Consumer Society, and Dearling and Meltzer's 2003 book 'Another kind of Space' also demonstrate an increasing awareness of experimental living and attempts at living more sustainable lives.

As some of these studies show many projects and alternative ways of living take place in west Wales, leading to its association with alterity, such that it often portrayed as a 'fertile area' for new ideas and ways of being, an alternative space simmering underneath ordinary society (Osmond & Graham, 1984, p. 47). The roots of this are primarily traced back to the influences of John Seymour, and the success of his books centered around going 'Back to the Land' (BTTL) and his move to Wales in 1964 to Newport, Pembrokeshire (Seymour, 1978, 2009). In their overview of the Alternative Movement in the 1980s including the Glaneirw Community and CAT in Wales, Osmond and Graham (1984) witnessed a movement that was evolving from its previous incarnation. Highlighting the harsh experiences of those in the 1960s and 70s that had gone back to the land and the difficulty of self-sufficiency and creating an income, those interviewed in the 1980s that had stuck at it were described as having 'an air of the survivor about them' having worked out what was needed to make their lives on the land function (Osmond & Graham, 1984, p. 16, 22). The movement had also developed initiatives that served to support this type of lifestyle and to at least give those attracted to it a chance to sample it, an example being the WWOOF orgainsation 'Working Weekends on Organic Farms' (Osmond & Graham, 1984, p. 16) There is a sense of the alternative movement continuing to develop but also responding to context it is situated in, in order to survive, Osmond and Graham (1984) see it as being more practical in its goals mirroring a world that had shifted to a 'more realistic' stance. Although synonymous with its roots; dropping out, 'hippy', 'flower power' and 'the Good Life', were images that the alternative movement still had to contend with despite its shift to a more 'hard-headed' approach because of the 70s oil crisis and associated economic issues. (Osmond & Graham, 1984, p.22-23).

Observing the need to address what the author calls 'sustainability crises', Maxey (2002) studied three sustainable communities; Equinox, a housing cooperative in Manchester, Holtsfield, a chalet community near Gower and Brithdir Mawr in rural Pembrokeshire. Working with the potential that small-scale communities could bridge the gap to a more sustainable world and ease the transition, Maxey's (2002) study can be seen as an effort to understand how this could work in practice by experiencing and engaging with the everyday lives through a series of case studies. Economic, political, cultural and social factors are all identified as areas that represent barriers prohibiting a shift towards a different future, although his focus drifts towards more cultural and social elements. Maxey does offer a more holistic approach to counter the unevenness he sees in the existing literature, which focused on certain elements to the detriment of others, for example Fairlie's (2009) emphasis on planning issues (Maxey, 2002, p. 24). Adopting in-depth interviews and participant observation, Maxey observed 'diversity both between communities and within the same community over time' citing participants' (that were given the chance to engage with draft chapters) comments that it would be interesting to come back to their community as so much had changed since the fieldwork period, despite this, there were more commonalities than differences due to their 'overlapping in their struggles to reclaim sustainability and community from enclosures associated with the sustainability crises' (Maxey, 2002, p. 315). This change over time corroborated with his assertion of seeing 'sustainable communities as processes' (Maxey, 2002, p. 315). Although he sees this an under reported element of sustainable communities, it serves to underline other work such as Rigby's (1984)

and Pepper's (1991) studies, which also stressed their ever-changing nature. Further to this, Maxey observes a growing need for further research into other types of sustainable living including eco-villages, noting that such projects were 'just beginning to take off in the UK' (Maxey, 2002, p. 322).

The longevity and legacy of some of the alternative lifestyles and communities analyzed above has led to the characterization of Wales as having a sense of 'otherness' (Halfacree, 2011). Rural Wales in particular is imbued with feeling of difference or as Halfacree has summarized: 'beneath a staid, quiet, conservative exterior, rural Wales contains a thriving set of geographies of 'alternative lifestyle or alterity' (Halfacree, 2011, p.66). Quoting the Rough Guide to Wales' and its 'alternative', new age and green wales' section, west and mid-Wales are described as a haven for 'alternative lifestyles', demonstrating that this perception has entered into popular culture and its status as a place where these lifestyles are possible (Halfacree, 2011, p. 68).

Developing the notion of radical rurals further, and tapping into this emerging situation, Halfacree (2006b) has analyzed the BTTL movement as a critique of the 'super-productivism spaces of agribusiness' and that of the 'rural idyll of conventional counter-urbanisation' both of which compete within this post-productivist rural, and as part of the wider question of 'what...we want the countryside to be like?' (Halfacree, 2006b, p. 312). Seeing this radical element as neglected in the understanding of the variety of 'new countrysides' emerging, Halfacree situates this BTTL within the context of the wider changes seen in rural areas which have been outlined, broadly identifying two periods during the late 1960s/70s and the revival of counter-cultural ideas in the late 90s/2000s (Halfacree, 2006b, p. 310).

Following on from the more 'under the radar' sites in Wales like Brithdir Mawr and rural Wales 'association with the alternative', Lammas, an eco-village in Pembrokshire can be seen as an important precursor to OPD, and a good example of a grassroots initiative that aims to bridge the gap between alternative projects and the mainstream. There is a considerable body of work in relation to Lammas, which cannot be explored in detail here, although it will be elaborated on in the next section covering OPD, however it is important to note its significance in relation to its initial aim of securing planning permission from the outset rather than retrospectively. Using Lammas as a case study, Jones (2015) has explored the convergence of the mainstream and the radical, scrutinising the role of initiatives like this making use of the 'space' created by the state recognising the need for sustainable development, with the potential for wider reaching consequences.

Planning Changes

While a resurgence in 'radical rural' living and working initiatives was taking off across Britain, the planning system within which it was set was also changing, as evidenced by Lammas' experience eluded too above. Synonymous with low impact development, and indeed coining the term, Fairlie (2009) decries the lack of attention paid to the planning system by the environmental movement given the sizeable wave of green literature that emanates from it. Fairlie's (2009) bottom-up approach, critiques the system for the damage it has inflicted on the countryside, seeing it as a place that has been 'degraded by industrial agriculture and colonized by urban incomers', with the planning system still bound by the post-war format and national government policy that situates new homes within a 'sustainable patterns of development' framework (i.e in towns and cities) (Fairlie, 2009, p. xi). Remedying this injustice of land access, Fairlie argues for a new section to be included within the planning system, which should be exceptions to normal policy, namely Low Impact Development (LID), defined as 'a low impact development is one that though through its low negative environmental impact either enhances or does not significantly diminish environmental quality' (Fairlie, 2009, p. xiii).

LID is seen as a social contract, whereby people are given the opportunity to live in the country in return for providing environmental benefits' on land that is not 'artificially' expensive, and to enable affordable self-built homes, to essentially repopulate the countryside, revitalize local economies and enable a 'very different kind of rural society' (Fairlie, 2009, p. xi). Despite advocating for these types of developments, Fairlie (2009) is by no means anti-planning, on the contrary he sees it as essential as it has at least kept vast amounts of land from development, and as such posits that LIDs should be situated close to villages or within existing developments zones where practicable.

Pickerill and Maxey (2009) have also made a case for the bottom up, grassroots credentials of LID's as solution to the challenges faced in the countryside and its ability

to grow and change as it interacts with planners and policymakers, essentially working towards bringing it into the mainstream. The nature of these types of developments, will be discussed more comprehensively in the introduction to OPD chapter (Chapter 4), as many of the key tenets of LID underpin the subject of this thesis. Of interest with Pickerill and Maxey's (2009) book is its activist nature, calling on readers to get involved; on the ground, through lobbying, underlining that the future of the countryside, and indeed the wider world is in a state of flux which provides an opportunity for LID to take root and solve these issues. As such the book is designed as an overview of LID, together with a series of voices of those living low impact lives, examples are given ranging from perhaps more architecturally ambitious projects such as the Brighton Earthship and the Hockerton Housing Project in Nottinghamshire, to Green Hill in Scotland, which is based on more rudimentary housing such as Yurts. Projects like Tinkers Bubble and the Steward Community Woodland being given temporary planning permission because of their environmental and sustainability credentials has essentially created a precedent that will allow for more examples to come into fruition. This has been furthered by a particular example in west Wales, the rather infamous case of Tony Wrench's roundhouse in Brithdir Mawr, which was subject of a protracted planning battle and protests after being 'discovered' by authorities but subsequently succeeding to gain temporary planning, the first case under Policy 52 in Pembrokeshire (Wimbush, 2021). What stands out is the shift underway from hidden structures and those without planning permission to projects such as Lammas, which are trying to engage more with the planning system from the beginning and even helping shape Pembrokeshire's LID policy, highlighting the movement as a process. These developments can be seen as precursors to OPD and will be discussed in greater depth in chapter four.

Pickerill (2016) has argued that it is in fact cultural and social understandings of our lifestyle which limits our ability to mitigate or adapt to climate change rather than political or technological issues. Showcasing numerous case studies of eco-homes across the world and why more are not being built, Pickerill (2016) aims to overcome the social barriers such as perceived costliness and suggestions that they could be too primitive or unusual to become mainstream, and a tendency to stray from simplicity into overuse of technology to attain ecological standards, and widen the case for ecohomes in general (Pickerill, 2016). 'Place' is also explored through the lens of eco-

homes and villages. Now several years after its planning permission was granted, Lammas is revisited with this in mind. The location chosen, Pont y Gafel farm, was seen as a 'place empty of social meaning', a 'damaged natural environment' that was essentially a 'blank canvas...open to being (re)made' (Pickerill, 2016, p. 116). Lammas' aims of reclaiming farmland into a smallholding, working the land in harmony with nature are equated with 'utopian' visions and 'constructing a particular vision of a rural idyll' (Pickerill, 2016, p. 117).

Considering the binary relationship created by the Town and Country Planning setup and its enduring inflexibility despite a changing countryside, Scott et al. (2011) contemplated the future of the countryside in Wales through a series of tours for local people to stimulate discussion about what they would like to see and what was happening in terms of developments, funded by the Welsh Government. Within the widening scope of the countryside and the pressures on it, the authors aim to address a perceived imbalance in rural studies, citing a lack of sufficient research on the planning system, given its crucial role in determining what sort of developments are permitted (Scott et al., 2011).

Citing the content of the Wales Rural Development Plans of 1999 and 2008, as observing a shift away from agriculture, Scott et al. (2011) suggest that 'the rural [was] no longer the preserve of farmers' but rather a contested space. Ultimately Scott et al. (2011) call for a more united approach; the 'emphasis needs to switch to effective partnerships with local communities to produce more joined up thinking and strategies that are place specific and utilise better information and evidence from local communities, i.e. top down approaches engaging and meeting with bottom up approach' (Scott et al., 2011, p. 432). Of importance to this research, is Scott et al's (2011) conclusion that although national policy has acknowledged the challenges faced by rural areas, in practice this has not been realized or at least 'stifled' due to the strength of existing 'power structures' and opposition to them on the ground, creating delays in planning practice due to the resistant mindset of agencies and elected members to change established practices, noting that the planning system and rural governance as an 'oil tanker and whilst the wheel has been turned, there is a long time lag before any noticeable difference' (Scott et al., 2011, p. 432). Curry (1994) has also expressed the slow movement of institutions in the face of a restructuring countryside and the need for new policies to be more inclusive and complimentary.

One Planet Development

Drawing heavily on Fairlie's (2009) definition of LID as stated earlier, One Planet Development as outlined in the Welsh Government's Technical Advice Note 6 (2010) is a planning policy that allows people to build a home and livelihood on land in the countryside which cannot normally be developed and '...through its low impact either enhances or does not significantly diminish environmental quality'(Welsh Assembly Government, 2010, p.24). The key measurement being that occupants must achieve an ecological footprint of 2.4 global hectares or less, and show how they can eventually achieve, 1.88 global hectares (i.e One planet's worth of resources) (Welsh Assembly Government, 2010, p.24). This definition will be expanded upon in chapter four.

As discussed, despite the diversity of the people living in the countryside today and the gradual erosion of some of the fundamental norms of the post-war era, the duality between the urban and countryside endures. Planning authorities entrenched in the system set up by the Town and Country Planning Act of 1947 and its successors, along with the enduring productivist mindset amongst some of the agricultural community, as well as more idealistic notions of what the countryside should be, sets up a fraught environment for a policy such as OPD, given its setting in open countryside. This 'controversial' element has been observed and analyzed in the limited amount of literature surrounding OPD. Given that OPDs are an exception to the long-established rationale of planning, Harris (2019) has examined how the planning system has accommodated this form of sustainable living through a 'regime of practices' using Foucault's concept of governmentality, looking at the practices that have been put in place that sees planning go beyond land use into the realm of lifestyles and behaviours. Harris (2019) draws on planning applications for OPDs, letters of correspondence relating to views expressed by local inhabitants, and local planning authorities' committee reports and supplements this with stakeholder interviews to assess the tension caused by the mechanisms needed to implement and regulate (through measuring ecological footprints and extensive data collection culminating in annual monitoring reports) the policy. Despite OPD being a national policy that demonstrates an 'alternative vision of a sustainable countryside' and it being an exception to planning norms, which arguably reinforces them, it is found that views of some local communities and councilors remained 'embedded' in the 'traditional conception' of the countryside informed by the planning ideas in place since the Second World War

(Harris, 2019, p. 31). Notwithstanding these challenges, Harris (2019) argues that the OPD policy has been successful to a certain degree by shifting the debate past the first hurdle of gaining permission to start with, citing Fairlie's (2009) assertion that low impact developments were being judged and denied by system designed to protect against high impact development and sprawl which prevented them from getting off the ground (Harris, 2019, p. 31). The debate has therefore moved forward to a wider question regarding the role of planning for other forms of developments and how OPD exposes the unjust situation whereby those trying to live One Planet lives have to accept far-reaching scrutiny and regulation via the planning system, while the vast majority have the freedom to 'pursue unsustainable, three-planet lifestyles and behaviours' (Harris, 2019, p. 31).

Reflecting the challenge of living a one-planet life, perhaps the most overt and in-depth contribution to the literature regarding this way of living is Thorpe's (2015) manual on how to achieve it. Although written from an arguably academic perspective and as the author is a patron of the One Planet Council, which supports those looking to creating an OPD, the book introduces the concept and aims to tackle each element needed in order to realize the goal of living within the means of the planet. Although numerous texts have outlined the technologies and methods that can be adopted to become off-grid and by extension lowering your carbon footprint, and there is a glut of information out there demonstrating the advantages of no-dig and permaculture design, the book brings this together within the One planet framework. Chapters are dedicated to practical guidance on land management, water, energy, buildings, food and transport, illustrated with an array of photographs and diagrams, as well as advice on finding the right sort of land, financing and ways to attain the skills needed, demonstrating the formidable breadth of skills and knowledge needed to make a success of a one planet project. To supplement this, a range of projects exemplifying one planet living from across the UK (and one in Germany) are discussed, of particular note and relevance is Lammas, which as discussed already, has received a lot of attention in the literature.

Thorpe's book was published in 2015, just a few years after the creation of the OPD policy, limits the number of examples it can draw upon directly related to the policy and underlines its position as a 'How to' guide, and a call to broaden the scope of One Planet thinking to other areas of policy and development, further expanded upon in a

2019 book, One Planet Cities, which introduces the concept to urban areas (Thorpe, 2019). Thorpe (2015) makes a strong argument for adopting one planet living, analyzing the ways the UK could feed itself, how to provide more affordable housing, revitalizing the countryside with younger families and using the ecological footprint analysis for all planning decisions. The issues with bureaucracy and building regulations are alluded to within the overview of Lammas, hinting at possible issues with regulating OPDs and attitudes towards them. A few case studies of enterprises and initiatives tied to the land are also introduced as examples such as a cut flower business and a milk round within an eco-village, giving a glimpse of everyday living.

A further example of how OPD and the responses it elicits are 'live' topics is a very recent contribution by a prospective OPD applicant and their experience with the planning system and local politics, eventually leading to a rejection of her application. Although for obvious reasons, it cannot be considered amongst more balanced academic research, Delaney's (2020) book on 'How to epically Fail at One Planet Development' does add to existing debates and demonstrates the considerable local media attention given to OPDs and those aiming to live or living off-grid. It also provides context in terms of the type of political space and atmosphere many prospective applicants and indeed those with permission find themselves in. Although we are relying on a personal account of the experience and anecdotal evidence, many of the points raised merit further consideration, such as biases in local authorities, especially given that they do align with same points regarding local opposition raised in Harries' (2019) paper.

The wider questions asked regarding issues with housing, and second home ownership/holiday homes are valid and fall within the sphere of the experience of the OPD policy, and matters it could address (Delaney, 2020). Issues about bias against the policy feature prominently, which validates the need to evaluate the extent of these feeling towards OPDs and experience of it. Suggestions of ways of improving the inclusivity of the policy are also voiced as a way of combating the issues of housing and the benefits bill: 'It would be cheaper and more sensible to suggest that farmland near to towns...could be purchased for the purpose of OPD. Instead of being dumped in a council house, you're able to live on land, help build your own home and learn basic skills' (Delaney, 2020, p.58).

These debates and issues surrounding OPD have also been picked up by the Land Magazine, with a review of Delaney's book prompting the magazine's editor, Simon Fairlie to renew his call for 'the architects of One Planet Wales to develop edge of settlement policies that are accessible to all the people of Wales, especially youngsters, rather than just to a small minority of rural pioneers' ("Time for Plan Z", 2021). The Land Magazine, which advocates for access to land and its resources, has covered OPD since its inception, often noting the value of providing guidance for land closer to urban areas, rather than just for open countryside, for practical reasons but also to widen its appeal, whilst also stressing the possibility that the policy is open to 'abuse and gentrification' and 'is a Welsh planning policy designed for self-sufficient hippies' ("Time for Plan Z", 2021). This signals how 'live' the debate about how best to introduce people back onto the land and OPDs formal role in doing this, along with raising perceived issues surrounding the image of OPD and the type of people attracted to the policy.

In a similar vein, Wimbush (2021) charts his journey through alternative communities culminating in the co-founding the Lammas Eco-Village which now largely operates under the OPD policy. Writing from a personal perspective about the trials and turbulations but within the eco-village setting, the book provides a first-hand experience of living a one planet life. Keenly noted is a recent shift in the political scene towards greater conservative and nationalistic values, which has increased resistance and opposition from at least some planning authorities in turn discouraging many that would have applied. Wimbush is well placed to voice his opinion on these trends, as a planning consultant for many OPD applications, contending that contemporary experiences with the planning process have barely altered since Lammas' own involvement in the planning process, echoing earlier points raised about the inertia of authorities despite changes on a national level (Scott et al., 2011). Also raised is the annual monitoring process, a wealth of information created that should serve to demonstrate how the land can be used more productively and a measure of the eco-logical footprint of those living on it, which is not engaged with by the planning authorities but still needs to be completed in perpetuity. Other issues include the inadequate timescale (five years) to setup a business and land-based livelihood, the problem of old age and retirement due to the lack of provision for this in the policy and also for opportunities for younger people to 'explore land-based living without tying themselves down' (Wimbush, 2021, p. 273). The sense of Wales and west Wales being a beacon for the alternative scene, is also touched upon, with Wimbush observing that most OPDs have set up in Carmarthenshire, Pembrokeshire and Ceredigion, 'because people naturally gravitate to areas where there are social networks supportive of one planet living' which eases this transition (Wimbush, 2021, p. 273). Wimbush (2021) offers proof that OPD can be a success even within the strict parameters entailed.

Among more recent academic studies on sustainable living is Forde's (2020) ethnographic monograph that looks at living off grid via two Eco-villages in Wales. Focusing on what I term as the first wave of OPDs and on Policy 52 (a LID policy adopted in Pembrokeshire and the predecessor of the National OPD policy), Forde has explored the dialogue and 'power relations' between planning authorities and low impact developers in west Wales, through the lens of Brithdir Mawr, Tir y Gafel (Lammas) and also 'Y Mynydd (a pseudonym)', each with varying interest of low impact living and self-sufficiency (Forde, 2015, p. 83). Again, the view of Wales' being amenable to alternative lifestyles is strengthened. Availability of land and its Celtic heritage provide overtones of 'rusticity and folklore', seen as attractive qualities that have given rise to eco-hamlets and villages with Lammas portrayed as an activist movement that blends into the culturally Welsh 'imagined' ideas of 'anti-landlord and anti-ownership'(Forde, 2015, p. 84). Forde also reminds us of the idea of Ty Unnos (the concept of building a house in one night and having the right to live there) and the fact that it endures as a 'key folk model' (Forde, 2015, p. 83). These further develop the notions of secrecy and concealment attributed to west Wales, with many LIDs being hidden from authorities (Forde, 2015).

Drawing on anthropological fieldwork amongst eco-village residents, Forde exposes the tension between the planning rationale which is seen as preservationist, 'reinforcing the objectification of the countryside' and low-impact developers who see it as a system that refines something that does not work in the first place, critiquing the use of the word development in this case (Forde, 2015, p. 88). The 'alternativeness' of eco-building with differing methods and materials, is also emphasized as an issue in building regulations, as inspectors had a lack of experience with dealing with these, showing a system with a lack of flexibility such that LIDs were assessed using a conventional framework, in the same way as an ordinary home and ultimately planning is seen as a form of enclosure (Forde, 2015). Forde (2015) questions the overarching model that is left in place; heavily subsidized industrial agriculture, 'an artificially empty non-productive countryside' and housing at artificially high prices (Forde, 2015, p. 91). At the time of writing, Forde (2020) contends that OPD applications prove too difficult for individual households, pointing to the fact that as of February 2015, only two OPDs had gained approval and those had been initially turned down, due to the juxtaposition between what OPD/LID applicants see as sustainable and what is envisaged by the planning system, leading to long planning battles, and the potential that may LIDs would prefer to avoid engaging with planning from the outset and would opt for retrospective approval (Forde, 2015).

OPD is a planning policy and through the ongoing annual monitoring, involvement with the planning system will be of central importance to the overall experience of OPDs, as it is in Forde's (2015) research regarding eco-villages. Since early 2015 several new OPD applications have been approved, around 42 in total are in existence, all of which are primarily individual households rather than eco-villages, an interesting point in itself, indicating that the difficulties of the planning system may have been overcome to a certain extent. While new small scale OPDs have managed to get permission despite Forde's (2015) misgivings, the number does remain small suggesting that there are issues, some of which Harris (2019) has observed. Although this research will also cover some of the themes discussed in Forde (2015) and Harris' (2019) work it will attempt to get a sense of everyday life within the OPD framework. It is clear that OPD needs to be revisited due to a number of new and different smaller scale projects taking root, than have not been appreciated fully by studies to date.

The literature has been predominantly focused on an eco-village level, in terms of Lammas, which although living one planet lives, have permission based on Policy 52 rather than OPD specifically. Although these studies do illuminate issues and experiences that are likely to be similar to those of contemporary OPDs, an appreciation of what I term as the 'second wave' of OPDs is needed; applications that were expressly designed and envisaged through the policy, rather than developing in tandem or applied retrospectively. Although some work has started to look at these, Harris (2019) in particular includes interviews with a variety of stakeholders including OPD residents, applicants, prospective applicants and professional planners, however using a more theoretical lens, applying Foucault's concept of governmentality. Very

little work has directly looked at OPD and far from dismissing the work that has been done so far, this thesis will build on this by looking in more detail at the reality of OPD sites and those conducting One Planet lives, 'on the ground', it will also encompass a variety of external perspectives and seek to expand the scope of voices by including local councillors, farmers, the Welsh Government and other key stakeholders. It will also explore how the feelings and thoughts of those external to it continue to inform the experience of OPD participants. This will enable a more thorough and holistic understanding of the issues surrounding the policy and the experience of it in totality forming a bridge between the two.

The fact that the policy has been in place for more than a decade means that a more critical appraisal of what it looks like in 'reality' is needed. Although there has been an expectation that the policy would be refined and altered by the Welsh government in tune with what is happening on the ground, with some arguing for edge of settlement eco-homes with less emphasis on living solely from the land ("One Planet Footprint", 2011) it remains unchanged and has not been reviewed by the Welsh Government (Wrench, 2015). The One Planet Council, the volunteer run group supporting and advocating for OPD, is conducting their own quantitative questionnaire-based review (as of 2022) of existing OPDs to start building a more cohesive evidence base. This thesis will offer a more qualitative approach to supplement this data, whilst also incorporating a range of views from other stakeholders. Other contextual aspects as alluded to in the introduction to this thesis, such as a more visible narrative surrounding climate change and the need for more sustainable ways of living and working, demonstrate that OPD and the sustainability it envisages is an extremely 'live' topic which demands further attention, validating the timeliness of this research and the need to offer a more critical view of living sustainably but within what the policy envisages. This research draws upon Halfacree's (2007) assertion that the British countryside is with respect to space, in a period of crisis, which provides an opening for a more radical vision, albeit one 'engaged in a struggle', as with Lefebvre's trial by space (Halfacree, 2007, p. 138). Although OPD arguably represents a rather radical concept entering the mainstream as a government policy, the extent to which it is truly mainstream or engaged in its 'trial by space' will be evidenced by the experience of those living one planet lives. Halfacree (2007), calls for the study of 'real lives', encompassing not only those living radical rural life but others in the differentiated

countryside, and 'engaged research reporting on the trial as it evolves' (Halfacree, 2007, p. 138). This research uses this as a jumping off point by exploring the reality of OPD living and its potential 'trail by space'.

The research will therefore aim to answer the following questions:

What is happening on the ground with OPD?What does OPD look like, who is doing it, and why?What is the experience of OPD for those exposed to it?How is OPD being interpreted and debated with from the outside?How to do we make OPD 'fit for purpose' overall?

Leading on from the research questions and the jumping off point of needing to assess and evaluate 'real lives' and the experiences of those 'on the ground', this section will outline the methods used to collect this data and the participants of the study. As there is a lack of research looking at the experience of OPD expressly and the views of those external to it, this study focuses on qualitative data. To get a sense of the experiences and perceptions of OPD, a mixed methods approach is used to ensure a comprehensive overview. It utilises a mixture of case studies and semistructured interviews to produce a thorough picture of OPD at this moment in time. Where possible participant observation has been employed to further enrich the data collected, and to supplement interviews and general conversation.

Positionality

Every effort was given to maintaining impartiality throughout the research. However, my background and interests must be considered in relation to how the research idea was formulated and the subsequent analysis of the data collected. My interest in sustainability and living off the land, and other themes covered in this thesis, stem from a belief that other ways of being and living should be explored today as more ethical living alternatives. Not only is it interesting as academic study but I am approaching it almost as 'research as activism' (Valentine, 2004), in the sense that as well as understanding the nuances of how OPD operates on the ground, I am keen to investigate potential avenues which could be potentially adapted and adopted into other areas of policy. In this sense, although I was open minded about the extent to which one planet lives were being achieved, I viewed the overarching aims of OPD as positive from the outset. As a result, the questions that were developed aimed to build a deeper understanding of how living one planet lives was playing out in reality but it also meant that I wanted to consider how OPD was being interpreted from the outside, such that other stakeholders' (for example, Councillors, Planners etc) opinions and concerns were voiced. This could then identify some of the possible barriers for the expansion of the policy or improvements that could be implemented, and ultimately lead to possible amendments and recommendations that could widen

the appeal of the policy and satisfy the concerns of those opposed. Throughout the study, more mundanely, I was careful not to express my own opinions too strongly in any of the research situations and sought a position of 'critical friendship' (Holvikivi, 2019), whereby a degree of critique ultimately helps to reinforce those being studied.

Participants and Study Locations

With the number of OPDs currently operating at around 42 sites (OPC, n.d.) it is beyond the scope of this project to encapsulate the experience of living the OPD life in its entirety. It must also be noted that OPD is ongoing, and this thesis is engaging with it at this moment in time, to explore 'where it is at', so to speak, at this point and potentially where it could go. Given that most OPDs are currently situated in west Wales, with the vast majority being in the counties of Pembrokeshire, Carmarthenshire, Ceredigion and Pembrokeshire National Park (a separate planning authority) (OPC, n.d), this thesis aims to focus on these areas primarily and select case studies, sites for fieldwork and interviewees located in these places.

In terms of selecting OPD participants, initially I contacted the One Planet Council, which is an independent voluntary body which supports OPD, providing a bridge between planning authorities and applicants, who also engage with academics and policymakers (OPC, n.d.). An email was sent to Erica Thompson, chair of the OPC (who is also living on an OPD,) outlining the scope of the thesis, that being an overview of living one planet lives, whilst also incorporating the perceptions of those external to it, given its potential for informing the overall experience. Having already participated in a 'Practical Insights into OPD' course run by some OPDs, I had already met Erica which provided a good starting point to reach other potential participants. Although most OPD's are quite transparent in how they operate, and often offer open days, securing interviews and in particular site visits which potentially incorporates an element of fieldwork, is rather more difficult than approaching a community for example. Whereas in a community, your presence might be seen as less intrusive, OPDs are almost exclusively single households. After meeting with Erica and securing their OPD as one of the case studies, Erica introduced me via email to several OPDs that were of interest following our discussion. I then followed up with a further email to arrange site visits and

interviews if they agreed, as well providing a general overview of what the research entailed. All OPDs contacted were incredibly open, patient and keen to participate, seeing this type of research as an important contribution to the overall case to be made for sustainable living. A total of six OPDs took part in this research (see Tables 1 & 2), with four (including 3 of the case studies) being contacted via the OPC. The other two OPDs were contacted independently. Site visits for interviews and fieldwork, where applicable, took place during late Autumn 2021 and early Autumn 2022. Case studies were visited at least twice, some on multiple occasions in order to build a more comprehensive overview of daily life and to observe the land and landbased business at various points during the year.

At the outset, I deliberately had a very loose set of questions which corresponded to the core aims of the research. After the first few interviews had taken place, I to some degree modified and expanded questions in response to topics which were repeatedly mentioned, garnered attention, or provoked particularly impassioned answers. As such, the initial interviews served as much as pilots as they were data collection but it was felt that they material that they collected could still be used in the write-up. The whole study ended up with a stable range of primary questions that needed to be answered but also left room for wider discussion around topics that might not have been identified if the interview guide has been too rigid (see Appendix 1 & 2 for interview guides). It soon became quite clear that the semistructured interview approach felt more natural and conversational than a more formal questionnaire or interview, allowing greater scope for discussion in a relaxed atmosphere. It was also helpful to allow me to ask permission to return to OPD sites or to contact participants on another occasion if needed, allowing a return to questions that may not have been covered sufficiently during an interview or to ask new questions that arose from further research.

To supplement the conversations and semi-structured interviews, a degree of participant observation was also carried out for each case study. The duration of this varied depending on the nature of the business; for example, I spent much more time volunteering at Coed Talylan OPD as their business entails more engagement with volunteers. Time constraints in the research also limited the amount of time that could be spent at each OPD. To gain comprehensive first-hand experience of what day-to-day life is like for each would have required many weeks attendance across the course of a year because of the varied nature of the businesses and land management, and how they correspond to each season. Therefore, this not being possible, I focused on taking part in some element of participants' normal routines, engaging in tasks varying from deseeding chillies for seed saving, weed control for newly planted trees and mushroom cultivation. During all of this, conversation could continue from the interview and I had a further opportunity to gain insights into daily life.

Once the data had been collected, interviews were transcribed verbatim when recorded. When a recording could not be made, notes were taken throughout if possible or were immediately written up as soon as possible after the interview ended to ensure that the conversation and information remained fresh in my mind and to limit inaccuracies. Interviews were conducted in both English and Welsh, although the preference was to conduct interviews in English to speed up the process of transcribing. Mindful that many interviewees would be more comfortable using their native language to express their thoughts and opinions, however, unless interviewees brought up the possibility of switching from Welsh to English, I left the conversation to proceed naturally. Once the interviews - in person, over the phone or as video call - and conversations during participant observation were fully written up, I proceeded to clean the data and remove nonrelevant information, noting where this helped me build a more comprehensive picture of the attitudes and opinions of those being questioned. Re-reading the conversations in conjunction with my research questions allowed me to identify key topics raised by participants, which I highlighted and then grouped the responses according to these headings. This fed directly into the thematic structure of the empirical sections of the thesis.

For the chapter on OPDs themselves (Chapter 5), which introduces each household individually and provides information on the land and location, the residents themselves, the dwelling and the land-based enterprise in which they partake, the written structure roughly mirrors the management plan which OPD participants initially submit to be assessed by local planning authorities. This was a logical way to introduce each case study separately. The findings and discussion section relating to the OPDs then covered prominent topics and themes identified from the data. Similarly, the chapter focusing on those external to OPD (Chapter 6) was structured according to the key topics and themes drawn from the interviews, in many ways mirroring those discussed about OPDs themselves but also considering the underlying issues which shaped and framed the debate surrounding the policy.

Research Participants

		1		1
<u>OPD</u>	Participants	Location	<u>Planning</u>	<u>Notes</u>
			Permission	
			<u>Granted</u>	
Dan Y	Erica	Near Whitland,	2016 at	Joint
Berllan	Thompson &	Carmarthenshire	appeal	application
(Translated:	Chris Vernon			with 3 other
Under the				OPDs
Orchard)				
Swn yr Adar	Clare &	Near Hebron,	2019	
(translated:	James	Carmarthenshire		
Sound of the	Adamson	(Close to county		
birds)		border of		
		Pembrokeshire)		
Coed Talylan	James	Brecon Beacons	2020 (Not	
	Scrivens &	National Park	fully given	
	Sara		due to	
	Tommerup		Section 106	
			agreement)	

Table 1: OPD research Participants – Case Studies

<u>OPD</u>	Participants	Location	Planning Permission Granted	<u>Notes</u>
Llwyn Pur	Sioned Haf & Antonio Rizzo	Near Llansadwrn, Carmarthenshire	Early 2022	
Golwg Y	Matthew &	Near Newport,	2016	
Gwenyn	Charis	Pembrokeshire		
	Watkinson			
Lammas Eco-	Tao Wimbush	Glandwr,	2009	Lammas was
Village		Pembrokeshire		given
				permission
				under
				Pembrokeshire's
				Policy 52

Table 2: Other OPDs that participated in this research.

As shown above, the research broadly covers the geographical areas where most OPDs are located, although this was not possible in some cases, for example, in Ceredigion, due to time constraints or the timing of the interview and fieldwork period not matching the availability of possible participants. However, both Pembrokeshire and Carmarthenshire have been adequately represented and although the plan was to only include three case studies at the outset, a further three OPDs were also interviewed to provide more diversity in voices and offer a more robust sample. It is important to note that Tao Wimbush at Lammas has been included despite being given permission under Pembrokeshire's Policy 52 (a forerunner to OPD, which will be explained further in the chapter 4). This is justified as Lammas operates broadly under the OPD umbrella. Tao also acts as a freelance consultant on OPD applications, which means he arguably straddles both chapters five and six in this thesis that cover living one planet lives and those external to it, and as such has a good overview of the OPD experience in its totality, therefore some of his comments during interview are included across both chapters. Care was also taken to select OPDs at different stages, for example, those that had just been given permission, some a few years into their project, and others that had achieved their fifth-year targets, while Coed Talylan was selected despite not technically having full permission to pursue their OPD (an issue which will be explained later), as they were living a one planet life, at least anecdotally and crucially living on the land. Having an array of participants in different stages and in the case of Coed Talylan, the frustration of being technically on stop, is important for this research as it can demonstrate the vast range of experiences associated with one planet living.

Participants- External to OPD

Similarly, to the OPD participants, a range of people were interviewed to provide a comprehensive insight into perceptions of OPD 'from the outside' (see Table 3). Interviews were requested via email for the most part, in both Welsh and English, while some discussions with participants led to introductions to other potential interviewees. Two of the farmers interviewed were contacted via family friends that are involved with agriculture, which led to two more farmers willing to speak (albeit anonymously). Having the ability to speak Welsh, did to some degree make contacting councillors and farmers especially, much easier, as it did feel that participants were more forthcoming when addressed in Welsh. Unsurprisingly exploring the views of those opposed to OPD proved to be much easier than discovering the voices that are broadly supportive of it, especially amongst farmers and councillors, with many councillors approached expressing rather neutral opinions, while some had no opinion on OPD or could not recall an experience with the policy, despite being on a planning committee. Interviews were conducted inperson, or over the phone or via online video meeting when time constraints or covid safety measures did not allow. These largely took place over the course of an eightmonth period from mid 2021 to summer 2022 and ranged from thirty minutes to several hours. Those wishing to remain anonymous are referred to by a general title rather than by name. These interviews are supplemented by recordings of planning committee meetings of local authorities, online news and magazine articles and documents held on council planning portals, all of which are available for public reading and viewing. Local residents have not been approached for this study for

ethical reasons, given that many OPDs have created some tension, it was decided that in order not to create animosity, their opinions would be included via secondary sources only.

Interviewee	Role	Location of Interview
Alun Lenny	Plaid Cymru Councillor & Chairman of CCC Planning Committee	Phone
Derek Cundy	Labour Councillor & CCC Planning Committee Member	Online video
Dorian Phillips	Plaid Cymru Councillor & CCC Planning Committee Member	Phone
Huw George	Independent Councillor, Pembrokeshire	Phone
Councillor 1	Pembrokeshire	Phone
Councillor 2	Carmarthenshire	Online
Councillor 3	Pembrokeshire	Phone
Gareth Thomas	Professional Farmer, Dairy and beef, Plaid Cymru Councillor, CCC	In person

Table 3: Research Participants: Stakeholders and those external to OPD

	Planning Committee	
	Member	
Farmer 1	Farmer based in	In-person
	Carmarthenshire	
Farmer 2	Farmer based in	In-person
	Pembrokeshire	
Farmer 3	Farmer based in	Phone
	Ceredigion	
Farmer 4	Farmer based in	In-person
	Ceredigion	
Bill Knight	Freelance Consultant on	Online
	LID Planning	
	applications and worked	
	on the Ecological	
	Footprinting of the OPD	
	policy	
Off-Grid Interviewee	Person living off-grid	Online
Carmarthenshire Planning	Local authority Planning	Email correspondence
Department	Department	

Ceri Jones	Pembrokeshire Planning	Phone
	Officer	
Halan Lugar	Brecon Beacons National	Online
Helen Luqoq		Online
	Park Planning Authority	
David Thorpe	Author of 'One Planet	Online
	Living' and patron of the	
	One Planet Council/One	
	Planet Standard.	
Welsh Government		Email correspondence
Planning Department		1
Julie James	Walah Concernant	Encil commence dance
Julie James	Welsh Government,	Email correspondence
	Minister for Climate	
	Change	
Simon Fairlie	Proponent of LID, editor	Phone
	of Land Magazine and	
	Chapter7, also part of the	
	steering committee for	
	the formulation of the	
	policy.	
	poncy.	
Tao Wimbush	Resident of Lammas,	In-person
	Consultancy work for	
	LID/OPD	

Jane Davidson	Former Minister for	In-person
	Environment,	
	Sustainability and	
	Housing and put the OPD	
	policy.	

Ethical matters potentially arising from the research were considered and steps taken to mitigate possible issues. The research included visiting and interviewing participants about their lives, often taking place at their home, as well as observing and to some extent participating in their day to day lives. It also aimed to capture the thoughts and feelings of the participants with regards to living OPD lives and the debates surrounding it. These were active debates with potential for real life consequences and included discussing potentially private and personal matters, including lifestyle choices and political views. The potential for ongoing resentment and conflict from all of this was considered and treated with sensitivity throughout. As is standard, ethical approval was sought from the university and every effort made to ensure its ethics procedure was followed. One result of this was that participants were asked to share their views but to state when they did not want something to go 'on the record'. This was respected. Participants were also made aware if the interview was to be recorded and transcribed, and again asked for permission to do so. For telephone conversations, they were similarly made aware if it was to be recorded and if notes were to be taken during the conversation. Anonymity was granted to any that wished to participate but did not want their names attributed to their thoughts and comments. In these cases, participants are referred to under a general title, such as 'Farmer 1'. Overall, the research was undertaken, in summary, with a strong and explicit ethical framework. No concerns about this were raised at any time during the research by either participants or the university.

Though the scope of the thesis can be seen as quite wide ranging and could plausibly be seen as a weakness of the research project, as explained in the literature review, in general there is a lack of literature exploring OPD. This justifies the decision to incorporate a plethora of issues and themes to explore. Therefore, it is anticipated that this thesis will provide a starting point for others to investigate further. Before exploring the reality of living a one planet life in more depth, an overview of the OPD policy is necessary. This chapter will examine the history and roots of the policy, before giving an overview of key aspects of its content and the criteria those pursuing it must achieve. It will then expand upon the context established in the literature review, to provide a better analysis of the issues and concerns that potentially shape the debate surrounding it.

History

Wales has been seen as a place associated with the 'alternative' and 'radical rurals' (Halfacree, 2011), and the roots of the OPD policy can be traced back to some of the 'under the radar' developments surrounding Low Impact Development in West Wales. In 1997, Tony Wrench and Jane Faith designed and constructed a roundhouse with a turf roof, near Brithdir Mawr, a low impact eco-community living on an 80acre farm (TLIO, n.d.), one of a few roundhouses and buildings that had been erected on the land without planning permission. This was subsequently 'discovered' a year later, supposedly by a plane that spotted the glint of a solar panel on the roof of the roundhouse and reported to planning authorities (Wimbush, 2021, p.52). Though seventeen planning violations were identified at Brithdir Mawr, most were overcome, however Tony's roundhouse triggered a protracted planning battle over many years, threats of enforcement to demolish the dwelling, culminating in a decision by Tony and Jane to destroy the roundhouse (TLIO, n.d). However, a directaction protest organised by 'The Land is Ours', a land rights campaigning group affiliated with Simon Fairlie (his role in LID has been discussed in the literature review) supported the residents, 'stopping' them from demolishing the roundhouse and marching on the local planning office (TLIO, n.d). The discovery of the roundhouse and the ensuing planning battle caused a media frenzy, and it became an 'icon' of the low-impact development movement (Wimbush, 2021, p.53).

While the planning battle simmered, the UK Government's commitment to Agenda 21 (signed at the Rio Earth Summit in 1992), and the notion of sustainable

development eventually trickled down to local authorities (Wimbush, 2021, p.91). Pembrokeshire National Park Planning authorities along with the Countryside Council for Wales and the Welsh Assembly commissioned a LID report and its positive findings lead to another report by Baker Associates exploring how LID policies could be created, along with public consultations and forums, one of which was attended by Simon Fairlie, with his outline and definition of LID being folded into the criteria (Wimbush, 2021, p.92; S. Fairlie, personal communication, November 29, 2021).

This led to the formation and subsequent adoption of Policy 52 in Pembrokeshire in 2006 which allowed the development of 'exemplars of sustainable living' to be permitted as an exception in the strictly controlled countryside (Wimbush, 2021, p. 92). Discussing the role of the grassroots movement in helping shape the policy guidance, Tao Wimbush (one of the founders of Lammas Eco-Village-discussed later) attributed the creation of Policy 52 itself to: 'all the people being in the right place at the right time, we had a good grassroots movement, academics like Larch Maxey and Jenny Pickerill doing good research to support our arguments, and also enlightened politicians..'(T. Wimbush, personal communication, January 27, 2022).

Despite several elements coming together in the formulation of the policy, clearly 'under the radar' projects, like the roundhouse at Brithdir Mawr served to create a dialogue between the 'alternative' movement and the 'mainstream', further highlighting the potential 'space' created by these more 'radical rurals'. The absurdity of this dialogue is encapsulated by Tony Wrench's experience of communicating with sperate divisions of the same planning department and highlights the difficulty faced by the 'mainstream' to accommodate projects with a more radical edge: 'one [section of the planning department] was threatening us with injunctions to force us to demolish it [the roundhouse], [while] the other was gratefully accepting our suggestions for changes to the wording on a new Low Impact Development policy they were formulating (Wrench, 2015, p.25)

Around the same time as Policy 52 was coming to fruition, an idea for an eco-village was starting to form, Tao Wimbush who had weaved his way through other 'alternative' settlements such as Tipi Valley, Brithdir Mawr and the chalet

community Holtsfield in Caswell, Swansea, with a small group formulated the idea of Lammas (Wimbush, 2021). The proposal being a sizeable piece of farmland in Pembrokeshire, divided into nine smallholdings with a communal structure (Wimbush, 2021). Lammas faced a long battle with the planning authorities, as well as local opposition, with the formation of a 'Dim Lammas' group (Translation- No Lammas), underlining the opposition projects that are considered 'different' face (Wimbush, 2021, p.105). However, unlike the roundhouse example at Brithdir Mawr, which operated secretly until being discovered, with retrospective planning being pursued thereafter, Lammas openly consulted and presented their ideas to the community, with the goal of gaining planning permission and setting a precedent for similar developments, opening up the 'space' for others (Wimbush, 2021, p.100). Tao's intention was to fuse both the alternative and mainstream cultures in light of the general increase in awareness of climate change and the need to live more sustainably (Wimbush, 2021, pp. 100-101). Whereas low impact living had normally eschewed planning authorities, Lammas favoured close engagement.

Although there was a policy legitimising LID, only a few applications went through, while the first three, including Tony Wrench's Roundhouse and Lammas were refused (Fairlie, 2009, p. 156). The strictness of the policy had been cited as a significant barrier, with the need of meeting 75% of basic needs from the land, while the contents provided ample room for an application to be refused regardless of its merits, if the planning officer was biased against it, suggesting concern amongst planners about what the policy could lead to (Fairlie, 2009, p. 156). While Policy 52 had its shortcomings, it provided a starting point for further policy developments (Fairlie, 2009, p.157).

Policy 52 can therefore be seen as the precursor of OPD. When Jane Davidson became Minister for Environment, Sustainability and Housing in 2007, work that had been commissioned from Cardiff University on LID was '...sitting on a shelf with no desire to do anything with it, I was thinking how am I going to show in the planning system how we are going to take sustainability right through it. We've got policy 52, but I am not seeing it transforming planning systems'(J. Davidson, personal communication, March 3, 2022). Davidson credits being able to create the policy, as having the right people in place, '...we talked together about the possibility of LID together for hours, but I wanted to tie it to land use and incomes, so that it was an

economic opportunity, lives and livelihoods' (J. Davidson, personal communication, March 3, 2022). Davidson's role in scaling it up to national policy has been described as 'instrumental' (T. Wimbush, personal communication, January 27, 2022) but a wider commitment to sustainability also created the policy context for OPD to be realised. Of note, is also Jane Davidson's conviction that Wales as a devolved nation possess the flexibility to be a 'test bed' and 'pilot' for different approaches, such as 'cultural behaviour-change experiments' (Davidson, 2020, p.3). OPD is almost an experimental project as Davidson sees it as a way of offering apprenticeships in living sustainably, as well as Wales situating itself within global issues, and dealing with it on a local level (Davidson, 2020, p.18)

The Government of Wales Act 2006 put sustainable development at the 'heart' of the Senedd's aims (Welsh Assembly Government, 2009, foreword), placing Wales amongst just a handful of other countries with the remit of contributing to the enabling of '...all people throughout the world to satisfy their basic needs and enjoy a better quality of life without compromising the quality of life of future generations' (Welsh Assembly Government, 2009, p. 8). In essence pursuing sustainability is a statutory duty of the Welsh Government and is a central organising principle for all elements of society (Welsh Assembly Government, 2009, p.1). The One Wales: One planet document released in 2009, sets out this vision with the overall goal of Wales becoming a One Planet nation. This entails living within its environmental limits 'within the lifetime of a generation', using 'only its fair share of the earth's resources' ensuring Wales' ecological footprint is reduced to the 'global average availability of resources, amounting to 1.88 global hectares per person (Welsh Assembly Government, 2009, p.17). To achieve this, the documents highlight the 'radical' change needed in all parts of society such as sustainable resource use; using less energy, creating more energy at community level, as well as focusing on renewables, increasing biodiversity, transitioning to a low carbon and low waste economy and promoting the values of healthy living and quality of life (Welsh Assembly Government, 2009, p. 1,9, 14-15).

The OPD policy was unveiled at the Royal Welsh Show in July 2010, and the basic outline of the policy published as part of Technical Advice Note 6: Planning for Sustainable Rural Communities (J. Davidson, personal communication, March 3,

2022). Subsequently the Practice Guidance for OPD was published in 2012 to give in-depth detail on the essential elements and criteria for applications and for evaluating them (Welsh Government, 2012). Since then, other policies have emerged which are broadly in line with the values of OPD, the WG passed the Wellbeing of Future Generations Act in 2015, further committing Wales to forward thinking, requiring public bodies 'to think about the long-term impact' of its decisions (Future Generations commissioner for Wales). This is a unique piece of legislation, a world first, an act that preserves '...the rights of future generations alongside current ones... [and] embed[s] this commitment into everything...' that Welsh Government ministers do (Davidson, 2020, p.1).

OPD Requirements

TAN 6 outlines the crucial role of the planning system in supporting sustainable, living and working rural communities to ensure that they are 'economically, socially and environmentally sustainable' whilst also protecting and enhancing both the historic and natural environment (Welsh Assembly Government, 2010, p.8). In order to meet the target of Wales only using its fair share of resources within a lifetime of a generation, OPDs 'should achieve an ecological footprint of 2.4 global hectares per person or less in terms of consumption and demonstrate a clear potential to move towards 1.88 global hectares over time' (Welsh Government, 2012, p. 1), the 1.88 gh figure relates to the amount of resources per person as of 2007, and an ecological calculator is used to ensure compliance with this. Further to this, OPDs in open countryside need to provide the inhabitants with their minimum needs in terms of income, food, energy and waste assimilation over a period of no more than five years from the commencement of work on site' (Planning Policy Wales, p.61). Due to OPD being an exception to the strict rules surrounding building in the countryside, applications are scrutinised very closely to ensure they meet the criteria (Welsh Government, 2012, p. 3). As a result, Tan 6 and the practical guidance highlight the need for 'robust evidence' which is supplied via a management plan as part of the planning application (Welsh Assembly Government, 2010, p.25).

The Management Plan

The main element of the planning application for OPD is the management plan which provides in-depth information on a range of topics. It starts with a baseline description of the land to provide an extensive context for the proposal, which will ultimately show how the OPD will have a positive influence. This includes an overview of the location, existing services on site and access, as well as the physical geography of the site, with aspects such as geology, topography and importantly the soil also considered (Welsh Government, 2012, p.14). Another important element of the baseline is the biodiversity report, which establishes the habitats already found onsite, as well as a record of the important flora and fauna (Welsh Government, 2012, p.14). A 'Design and Strategy' section follows this, to give an overview of the proposals for the site and illustrates the aims and potential future of the project (Welsh Government, 2012). Permaculture as a design strategy heavily influences these elements of the Management Plan, given its 'holistic nature' (Welsh Government, 2012, p.19).

Main Elements of the Management Plan

1) Business and Improvement Plan

This section covers a range of aspects seen as key to the overall main goals of the inhabitants reducing their environmental footprint, 'meeting their everyday needs' from the site, whilst also ensuring they are improving the 'environmental capital' of the land (Welsh Government, 2012, p.17). This 'integrated' and 'symbiotic' system justifies the development and the need to live on the land (Welsh Government, 2012, p.17).

1.a. Land-based Activity

Essentially the land-based activities on site, such as subsistence activities and the business attached to the OPD need to provide the 'minimum needs' of the inhabitants within five years (Welsh Government, 2012). This means that an income needs to be generated to cover costs such as council tax, travel, clothing, IT and

communications, and any food not produced on the land (Welsh Government, 2012, p.20). A total of 65% of food needs to be generated by the land, a minimum of 30% of food must be produced on site, a further 35% of the food budget can come from the income created by the land-based business, so the more food produced from the land, the less income you will need to supplement the overall food budget (Welsh Government, 2012, p.17). Courses and training can also be part of the income, as OPDs are likely to have an educational aspect, however income from this should be subsidiary to the primary land-based activity (Welsh Government, 2012, p.20.) In essence a 'clear relationship' between the use of the land and the projects proposed' must be shown (Welsh Assembly Government. 2010, p.25).

For each component in the Business and Improvement Plan there is an essential and contributory criteria section, for example, for this particular component, the essential criteria would be for the OPD site to provide minimum food and income needs, while the contributory criteria would highlight the potential benefits of the OPD operating to the wider community, such as food for local markets, which in turn lowers local ecological footprints (Welsh Government, 2012, p. 22). These sections then correspond to the monitoring aspect of OPD living, demonstrating how activities will be measured, and how they are to be quantified for the monitoring report. Lastly the Practice Guidance cites the data that needs to be collected to inform the Ecological Footprint analysis such as data relating to the quantities of food harvested and food bought from offsite, as well as the number of deliveries (travel), and energy used during processing where applicable.

1.b. Land Management

OPDs have an onus to not only preserve the habitats and wildlife on the land but also to enhance these wherever possible as well as potentially enrich the wider landscape (Welsh Government, 2012, p.24). Using the ecological baseline, as a measure, OPDs are expected to recreate habitats, introduce wildlife corridors and hedgerows, to boost biodiversity, reshaping the landscape that has potentially been changed by intensive agriculture (Welsh Government, 2012, p.25). Ensuring that the developments do not have a negative impact on the wider landscape is also important, with the guidance proposing appropriate siting and screening by planting to blend them into the countryside (Welsh Government, 2012, p.25).

1.c. Energy, Water and Waste

Minimising water and energy, as well as reusing them where possible is another stipulation of the policy (Welsh Government, 2012, p.31). The OPD site should generate its own renewable energy by using a variety of options including solar, wind, water and biomass, or a combination of them (Welsh Government, 2012, p.32). Although connecting to the grid is allowed, it should be for feeding energy back into it, but drawing from it when necessary is permitted, however this then counts towards the EF. Building design is big aspect of minimising energy needs, with the use of passive solar design using southern aspects and windows to trap warm air (Welsh Government, 2012, p.33). For waste, minimising is again key, with composting to break down organic waste, which can be used on food crops (Welsh Government, 2012, p.38).

1.d. Zero Carbon Buildings

The expectation with OPD buildings is that they will be 'zero carbon' in construction and use, although having no environmental impact when building would be near impossible, the goal is to minimise this and make buildings as sustainable as possible (Welsh Government, 2012, p.40). This means using mostly local materials to reduce emissions created by the distance they have to travel, as well as selecting materials that are ecological friendly but possess excellent insulating properties (Welsh Government, 2012, p.41). Applicants also need to consider how the building would be dismantled if the exit strategy was triggered (Welsh Government, 2012, p.44).

1.e. Community Impact & Travel

OPDs are expected to have a positive social and economic effect on the immediate community, such as supporting rural services such as attending local schools, clubs, and events, and possibly offering open days and hosting local events, or even supplying their products locally (Welsh Government, 2012, p.48). Community integration for OPDs is also important, with the Practice Guidance stipulating that they should be 'part of the social and economic fabric of the Welsh Countryside' and therefore not too 'isolated' or 'inward-looking' (Welsh Government, 2012, p.20). As much of the income of OPDs is derived from onsite activities, travel is expected to be kept at a minimum, with sharing lifts and using low emission options to ensure compliance with the ecological footprint requirement (Welsh Government, 2012, p.52). Participants also need to consider travel to the site, such as visitors, as this is also factored into the overall ecological footprint (Welsh Government, 2012, p.53).

1.f. Monitoring/ Exit Strategy

OPDs residents are expected to provide an annual report to planning authorities at the end of each year in perpetuity, detailing the progress of their OPD, as well as account for their spending throughout the year, in conjunction with the Ecological Footprint Calculator. The management plan must also detail an exit strategy in the event that the OPD fails, meaning that the building can be removed or re-purposed, with applicants expected to explain how this would take place.

Context of the OPD policy

It is essential to acknowledge the context the OPD policy is situated in, if we are to understand the reality of the experience of it in Wales, how the ongoing cultural and historical significance of farming, along with planning legislation that has sought to curtail development in the countryside shapes the response to OPD. As outlined above, the OPD policy, challenges current agricultural practices, even if it does so inadvertently, as it demands for a vastly different way of managing the land by looking for productivity but also increasing biodiversity alongside it, such as using design strategies like Permaculture. To satisfy the ecological footprint requirement, the inputs also need to be drastically different, the machinery used or not used and the use of natural fertilisers, and no pesticides.

The Changning Countryside

As outlined in the literature review, both the purpose and meaning of the countryside has shifted and evolved over time. The opportunity created by the erosion of the productivist regime allowed for a richer diversity of people living in rural areas and the need to draw out the more 'radical ruralities' and counter cultural elements within the catch all term, counter-urbanisation and the broader post-productivist countryside(Halfacree 2006b). These feed into the broader debate around the future vision for the countryside (Halfacree 2006b). Despite these developments, the postproductivist countryside co-exists alongside productivism (Ilbery and Bowler, 1998) and land remains predominantly used for agriculture, with round 80% in Wales (Natural Resources Wales, 2022), even with growing criticism of its practices (Wasley, 2020) and livestock farming's ever-increasing share of carbon emissions (Monbiot, 2022). Conventional and increasingly intensive farming remains a key feature of the countryside.

Pressure on agriculture

As touched upon earlier, farming and in particular livestock farming have been criticised for various reasons for several decades, however it is now being increasingly singled out for its big share of greenhouse gas emissions, as well as the effect of monocultures on biodiversity loss in recent years (Kripnick, 2022). Coupled with the destabilising effects of Brexit, the pandemic and the war in Ukraine, inflation increasing the prices of animal feed and fertilisers, and ageing farming community, agriculture in Wales and globally, is under increased pressure (Lewis, 2022). As a result, there ha been some efforts to combat these negative narratives, such as the 'Guardians of the Welsh Land' campaign by the Farmers' Union of Wales (FUW, 2022). As well as the strong ongoing cultural image of farming, the agricultural industry is finding itself under attack.

The Alternative Countryside

In addition to farming remaining a fundamental aspect of the countryside and its increasingly debated practices, it is necessary to briefly discuss another contextual point, raised in the literature review, before delving into the views of those living one

planet lives. In west Wales, there remains a legacy of alternative lifestyles typified by the story of Lammas Eco-village and its engagement with planning authorities. Many OPDs are now set up in this area and concerns regarding the proliferation of these places and people have potential to frame viewpoints and informs engagement with the policy. Currently there are around 40 approved OPD applications, with 42 sites in total (One Planet Council, n.d.). With about 55 smallholdings in total broadly operating as one planet developments, for example there are nine plots at Lammas which although coming under Policy 52, are effectively living one planet lives (One Planet Council, n.d.). Most are in south-west Wales, in the counties of Pembrokeshire, Carmarthenshire, Ceredigion and Pembrokeshire Coast National Park, to a lesser extent (One Planet Council, 2022, p.11). It is interesting to note that, although the OPD policy allows co-operative communities or large settlements, all sites that operate expressly under the policy are single unit homes (Welsh Assembly Government, 2010, p.24).

This chapter will focus primarily on three case studies of OPDs to illustrate how they fulfil the requirements of the policy, to get a sense of what this looks like in reality on the ground and explore the experience and perceptions of living One Planet lives. Each are at different stages in the process, broadly representing those at the beginning of the setup phase, three years into the five-year period, and an OPD that has achieved its fifth-year targets. The data presented focuses primarily on OPDs that have been setup because of the policy, rather than sites applying it retrospectively. Firstly, this chapter will treat these case studies individually, offering a broad description of the look and feel of the OPD sites in terms of land use, location, planning context, management plans, livelihoods, businesses and the homes built or planned, to show how OPD policy manifests itself. It will also briefly introduce the participants, giving a description of their background before this is elaborated upon in the discussion section. Following the introduction of the three case studies, a brief overview of other OPD participants that are part of this research will be given. Secondly, the findings section will look at the motivations and feelings of all the participants towards living one planet lives, issues with the application and monitoring aspects of the policy, general day to day living, including perceptions participants have of how they are viewed by those external to OPD, blending them together rather than treating them in isolation.

2.1. Dan y Berllan- Rhiw Las



Figure 1. 'Conventional looking': Dan Y Berllan OPD has a lime plastered exterior with local larch cladding, large solar arrays cover most of the roof to maximise energy production.

The Land & Location

Dan Y Berllan (translated: Under the Orchard), is located near Whitland in Carmarthenshire and received planning permission in 2016 at appeal after initially being denied by planning committee against the recommendation for approval by the planning officer. It is one of four OPD households collectively named as Rhiw Las that were submitted as one application in late 2014 but function individually. Dan y Berllan occupies one of the approximately 5-acre plots, (with Rhiw Las being around 21.5 acres in total), with a forested part of the total acreage being shared between all four OPDs. There is a storage barn on site that is also shared via a Ltd company that they created. The land was previously used as farmland for both grass and cereal but had been used as a smallholding that produced organic meat before becoming a site for OPDs. The land is mostly sloping, with a flatter section around halfway into the site, where the four dwellings are situated.



Figure 2. Raised beds help the family reach their target of producing at least 30% of food from the site, although they far exceed this.



Figure 3. The polytunnels in late September is still producing lots of fruit and vegetables, winter salads are grown to supplement stored foods.

Residents

Dan Y Berllan is inhabited by Erica Thompson and Chris Vernon and their two small children. Both have a background in academia, with Erica holding a PhD in Climate science and Chris in Glaciology. Erica currently works from home as a Senior Policy Fellow of Modelling and Simulation, as well as on their OPD. Chris has worked in the mobile telecoms industry on radio network design and architecture, as well as with the Met office. Both are part of the One Planet Council.

Dwelling

The house is a two-storey roundwood timber framed strawbale house, built using clay plaster and rendered with a lime plastered interior and exterior, and partly cladded with Welsh larch. It is approximately 9m x 13m and has a veranda wrapping around two sides of the house, for outdoor working space and a glass entrance porch which is also utilised to grow seedlings. The house has a wood burning stove that provides heat and is also used for cooking when there is a lack of available power from the 6.5kW solar array which is fixed to the roof of the house. The composting toilet is situated away from the main house. Although the house is 'zero carbon' in

construction and use, and makes use of traditional materials, which are not considered the norm, the house looks and feels like a conventional home as shown by the photos. The price per square meter to construct the house is comparable to the lower end homes built by large developers. The conventional look of the home is important to Erica and Chris, as a way of taking OPD even more 'mainstream'.



Figure 4. An outbuilding with more Solar Panels, rainwater harvesting, and water storage tank. Water pressure is created using the natural gradient of the land.



Figure 5. A reed bed system, visible to the left of the home filters grey water. An electric bike seen in the foreground is used to take their children to school.

Land-based Enterprise

A series of micro-businesses are attached to the OPD in order to meet the minimum needs of the family, this includes a two-acre apple orchard that produces apple juice and dried apple rings. As the OPD has only recently passed the five-year target, the orchard is still developing but already produces a substantial yield. Erica and Chris also keep bees, producing honey and other hive products, with Chris also experimenting with queen bee rearing. There is a cabin on site which acts as a facility to process the products. Although the land-based businesses were originally intended to just be apple juice and honey, they also keep turkeys and chickens and saw the opportunity to develop a hatching eggs business from these, with half dozen Norfolk Black turkey hatching eggs fetching as much as £12-20 in spring, these are predominantly sold via eBay. Seeds are also produced as a side-business, which are also supplied to the Wales Seed Hub, which aims to increase diversity and only supply seed that are grown using agroecological practices which are adapted to the

Welsh climate (Wales Seed Hub, 2022). This demonstrates the flexibility needed in a management plan and how participants respond to living the OPD life and being on the land itself. As Erica and Chris explained, their microbusinesses worked well together, as the seeds went in during February and March when there was little to do with bees and the hatching birds were still inside, which meant that the garden was quite established by the time the real work started with the bees. While the apple side of the business peaked in autumn, which provided a good balance.



Figure 6. Honey and Apple Juice produced by Dan y Berllan, with the OPD produce sticker demonstrating the low ecological footprint associated with the products.

2.2. Swn yr Adar

The Land & Location

Swn yr Adar (translated: Sound of the birds), is an OPD located near Hebron, Carmarthenshire, close to the county border of Pembrokeshire. It was granted permission by the local planning authority in 2019 and is around 3 years into the setup phase.

The land itself encompasses sixteen acres in total of former farmland, which is certified organic, of which nine are included in the management plan for the OPD, meaning it is larger than the average OPD, being approximately 4/5acres (One Planet Council, 2022). The other seven acres remain in use for silage production for local farms and a wooded area near the river at the bottom of the property remains a nature area. The land itself is south-east facing and was formerly used for farming activities such as cultivation (silage) and stock grazing, with horse grazing being the primary use in recent times. A coppice woodland of 1,400 mixed native trees have been planted to provide firewood for heating and cooking, as well as creating shelter and screening from the neighbouring farm. Organic compost, green waste, wood chip and local manure have been added to garden area to boost productivity, although this will be produced on site as the business matures.

The site is designed and informed by permaculture, regenerative and agroforestry techniques. This forms the basis of their extensive tree planting scheme, including leaving a gap between planting as silvopasture, as they plan to intermix the orchard and nuttery with livestock in the future. Near hedgerows, the design includes an understory of diverse herbs, wildflowers and comfrey for mulching, before moving up to the tree layer, which includes elder, which can be used medicinally and nitrogen fixing timber trees such as Robinia (Black locust). There are also food crops such as apples, pears and nuts intermingled, with some trees underplanted with fruit bushes such as currants and gooseberries. No-dig methods are used in the vegetable growing areas, with the participants using broad forking to aerate the soil and increase the root zone the plants have access to without turning the soil over. James was keen to point out how quite marginal land which is not normally viewed as

productive can be improved this way, although they had chosen their land quite carefully. Growing spaces are located to the bottom of the site to use the gravity fed irrigation system from a borehole at the top of the site. The land that is not used for food production is managed by a combination of mowing and local farmers grazing their animals, with the proviso that wildflowers are left to set seed before cutting.



Figure 7. Late Summer. The trees planted are begging to grow, the house currently being developed can be seen nestled near the bottom of the land.

Residents

Clare and James Adamson (along with their child) both come from what they call a 'food activism' background and have previously lived off-grid. Clare initially

worked in renewable energy, with a background in project management, communications and marketing, before working for a children's charity which aimed at getting children to learn how to grow food by visiting schools to run workshops and ultimately engaging people in local food production. James got into horticulture through community development, working on cross-cultural projects in ethnically diverse areas in Bristol, bringing people together through growing and eating before moving into more commercial growing, such as working for a CSA enterprise, as well as offering training in Permaculture Design and Agroforestry. Both work fulltime on running their land-based enterprise. Before setting up their OPD, Clare and James toured for a year visiting land-based communities in the UK and ended up volunteering on an OPD which is quite close to the land they now live on. Although initially wary of the 'excessive rules' of the policy, and the 'big-brother' like nature of the monitoring, they spoke to residents at nearby Lammas and were friendly with one of the main authors of the OPD guidance, who had been steering them towards it, and eventually felt it was feasible.

Dwelling

As the home is being constructed under the Caravan Act it does not need to comply with building regulations nor the Code for Sustainable homes, however the residents have committed to attain the goal of zero carbon in construction and use as outlined by the OPD Practice Guidance. The participants are currently living in a static caravan as temporary accommodation while they build their home. The house is built with 80-90% renewable materials including traditional building materials such as lime and raw timber, along with processed materials like wood fibre insulation, and insulation made from recycled plastic bottles. Most of this has been purchased locally where possible. Excluding windows and guttering which can be reused, much of the house is essentially compostable. It is also a fairly simple design, essentially being a one storey cabin, with the residents intending for it to look like a modified Welsh longhouse. Water is provided via a borehole and moved around the land using gravity rather than an electric pump, and rainwater harvesting is utilised to irrigate the growing areas. The temporary dwelling makes use of solar power and this will also supply the electrical needs of their future home, along with a wood burning stove, that will also be used for cooking. Passive solar heating is also utilised through south facing windows and natural light maximised via skylights to further reduce energy needs.

The residents cite the numerous benefits of building under the Caravan Act as the ability to use more reclaimed materials and the flexibility this allows for saving on costs and an overall lighter touch on the land. They have also considered the need for the house to be dismantled if the exit strategy associated with the policy was enacted. Other than the more specialised building work, much of the labour is being carried out by the residents themselves. The timber cladding is already beginning to fade with the weather and trees planted have started to screen the building, helping it to blend into the landscape over time.



Figure 8. The participants say the house is partly based on a Welsh longhouse and is simple and modest it its design. It is still under construction but is beginning to take shape. It is lifted off the ground to limit the amount of concrete needed as footings,

and to ensure it stays dry. The cladding is already fading in the weather, helping it blend in.

Land-based enterprise

Swn yr Adar functions as a market garden, with the business evolving from the initial idea of producing medicinal herbs and cider. Cider production is still on the agenda but the residents are waiting for the fruit trees to grow. The business, One Planet Organics, produces vegetables for local retailers including five shops, two cafés, a regional wholesaler in Lampeter, a veg box scheme in Carmarthenshire and provides much of the family's food intake. There are two 28 meter x 7 meter wide polytunnels and a quarter of an acre outdoor growing space to facilitate this.



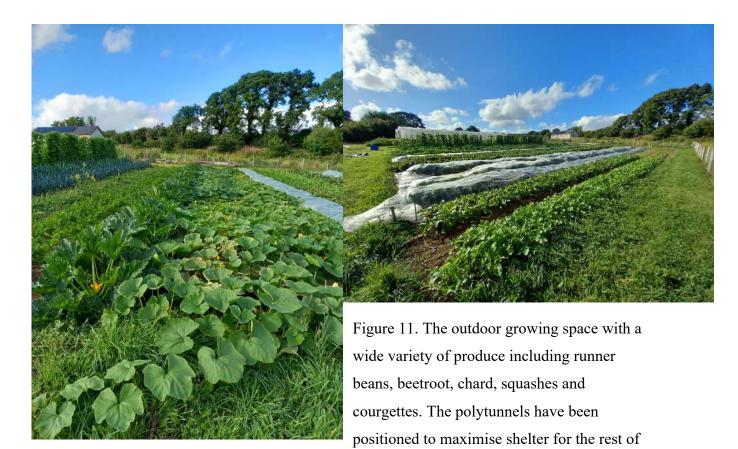
Figure 9. The polytunnels ensure optimum growing conditions enabling the residents to produce over a longer period and increase the diversity of products they can grow. A hazel hedge planted around the fenced off area will eventually screen the polytunnels from view and provide further shelter for the outside growing space.



The polytunnel is very productive even in early March.



Figure 10. Some produce growing on former grazing land; Shallots ready to be sent out to customers; Onions being dried.



the growing area.

2.3. Coed Talylan

The Land & Location

Coed Talylan is the first and only OPD to be situated in the Brecon Beacons National Park. It is a 70-acre woodland in total with permission for one OPD on around 8 acres, with the aim of establishing another OPD household on a separate 8-acre plot (currently for sale). The rest of the land is devoted to woodland conservation and a fungi refugia. In a departure from the single unit household which normally characterises OPD sites, Coed Talylan is set up as a Land Trust and a shared equity Housing Co-operative, such that when the other plot is bought and developed in line with the OPD requirements, the objective is for both families to work co-operatively, share resources and act together as stewards of the woodland, enabling cosufficiency rather than self-sufficiency. As such, the OPD is funded differently, and anyone that supports the ethos of the project can also buy shares in the trust. Approval was given by the planning committee in June 2020, however ongoing issues with the section 106 agreement mean that the OPD project has not officially started. The land was formerly used as a mushroom farm.



Figure 12. Late March. Coed Talylan is quite secluded, the growing area is in the foreground.

Residents

The site is occupied by Sara Tommerup and James Scrivens, and their two young children. Sara is a natural builder and carpenter who has worked with various traditional materials such as straw, lime and stone. She has background in architecture and has studied at the Centre of Alternative Technology. James is a mushroom grower with a background in researching applied mycology and coordinates the local food project, Hwb Bwyd Twyi. They have experience in similar projects in the Forest of Dean and Cornwall.

Dwelling

Currently, due to the complications with the 106 agreement, the participants are living onsite but in temporary structures, using a yurt for sleeping and an existing A-

frame cabin for cooking meals. The plan is to build a wooden cabin under the caravan act using an open-source design from a local architect. The dwelling will be energy efficient in line with the OPD guidance and built using local timber with a green roof and utilise passive solar design. It will be built off the ground, meaning that it can be unbolted and moved if needed.



Figure 13. A yurt being used for temporary accommodation.

Land-based enterprise

The main land-based business is mushroom growing. This includes growing a multitude of different fungi, for example using coppiced alder from the land to cultivate shiitake mushrooms by inoculating logs with mycelium which are sold both fresh and dried. Turkey tail mushrooms are also produced as a medicinal tea, as well as mushroom growing kits. James also offers mushroom cultivation courses to inspire others to create a low-cost, low-tech side business. Sara offers carpentry courses for women only, incorporating natural building, using timber, either from their land or locally sourced, she also produces products such as yurts and compost toilets. Courses are also planned in demonstrating aspects of LID and One Planet living. James and Sara also highlighted the intention of moving into seed saving, in

order to contribute to the Wales Seed Hub, creating charcoal and bio-char, and the potential of using the onsite willow for basket making.



Figure 14. Various mushrooms cultivated at Coed Talylan.



Figure 15. Volunteers inoculate logs with mycelium. Logs are thrown into the cold stream to 'shock' them to produce mushrooms.

2.4. Further OPD participants

Llwyn Pur - Sioned Haf & Antonio Rizzo

Llwyn Pur OPD is located near Llansadwrn, Carmarthenshire, with permission granted in early 2022 after submitting in August 2021. Sioned, grew up just five miles away from the OPD site, and is a post-doctorate researcher, working for a local Community Benefit Society that works with communities on energy projects to reduce costs through clean renewable energy. Her partner, Antonio Rizzo (not interviewed), is a qualified winemaker. They acquired the land in 2018, planting a 1acre vineyard intermixed with wildflowers in 2020, along with an orchard and a nuttery. They are currently in the process of building their home, which is a timber framed and hempcrete house, using local companies where possible. Their business will primarily be winemaking and supplying this to local markets. They are also considering creating a system where people can bring an empty bottle and fill it on site.

Golwg Y Gwenyn (Bee View Farm) - Matthew & Charis Watkinson

Golwg y Gwenyn OPD is located near Newport, Pembrokeshire, having acquired the land in 2012, with planning permission granted in 2016 by planning committee, in a narrow vote. Both Matthew and Charis (not interviewed) are former vets. Their house is mostly upcycled and built around a horse lorry, with the land-based enterprise being egg production and beekeeping. Their OPD and to a greater extent, the off-grid element of their lifestyle has been well documented in local and national media, including a documentary presented by Ben Fogle.

Tao Wimbush - Lammas, Glandwr, Pembrokshire

A key figure in the LID movement. Co-founder and resident of the Lammas Eco-Village, eventually securing permission via Pembrokeshire's Policy 52. Broadly living under the OPD umbrella, as explained earlier, Tao in many respects represents both those living the life and those external to it, as he is also a consultant and agent for prospective OPDs.

2.5. Findings & Discussion

2.5.A. Motivations

Unsurprisingly all participants are to some degree motivated by political reasons or are at least prompted to change course due to an awareness of global issues such as climate change. As a result, all participants are aware of the need to shift to more sustainable ways of living, and OPD provides an avenue for them to do this in their own lives. Erica for example had already decided to reduce her carbon footprint before the OPD policy had even come to fruition, citing the 2009 Cop meeting in Copenhagen and its failure to act on evidence of climate change, and a realisation that governments and private companies were apathetic to these critical issues. She last flew in 2008 and vastly reduces her travel for work and conferences. Chris also made the point that he had a choice between being 'just another scientist' analysing data or doing something about it in his own life, while he had also grown up on a smallholding and wanted to return to the lifestyle.

Clare and James were also looking for ways to live more sustainably and in line with their values, coming from a slightly different angle they are interested in regenerating the environment and while also increasing capacity to feed people, which meant that OPD fitted what they wanted to do. In their case the policy had attracted them to Wales, as trying to do the same in England would have been difficult: 'I just don't have the energy for that fight and I don't want the stress or worry of planning officers coming in and saying no you can't do this, so OPD became the option really, as it allows what we wanted to do'(C. Adamson, personal communication, March 4, 2022). Similarly, OPD has enabled Sara and James' ideas, they had bought the land and then realised that there was a planning policy to support them. They discussed their motivation to live more sustainably in a far more emotive way, suggesting that there is an 'activist' strand to their decision: 'I have to live in a way that doesn't depend on an economic system that is exploitative, oppressive, degenerative... the only way to do that is to take care of your own shit. 10-15 years ago there was this warning that we are living through this 6th mass extinction, this is still not something people care about, that upsets me, now I have had to become numb to that fact, I can't go shouting about that because nobody cares' (J. Scrivens, personal communication, December 2, 2021). Finding a more sustainable way of living also inspired Bee View Farm: 'We've all got to be doing something more, something like this, we are all going to be forced to live like this, whether we like it or not. We just want to try to find the best way to do it now' (M. Watkinson, personal communication, February 1, 2022). There is a sense that OPD offers a channel to live in a way that participants are comfortable with, do something practical and to see change on a local level. Participants are aware that their actions are insignificant in the grand scheme of things but feel they could demonstrate a path for others and contribute by seeing what could be done with the land.

Within this desire to live sustainably and an awareness of apathy surrounding global issues there are glimpses of concern about the future: 'I don't feel secure about the future anymore, culturally, ecologically... we have a piece of land, if society collapses or whatever happens in the future, we've got his little 4-acre solar panel so to speak' (M. Watkinson, personal communication, February 1, 2022). As well as a streak of wanting to become more independent and break away from a reliance on centralised authority (J. Scrivens, personal communication, December 2, 2021).

Participants also expressed that they wanted to live on the land and be immersed in nature. For Sara, this element of living the OPD life was her main driving force, not

only in terms of improving her physical health but mentally also, citing that living in this way was good for her 'spirit', and wanting to share this experience and inspire others (S. Tommerup, personal communication, December 12, 2021). This also alludes to an earlier point made regarding Coed Talylan having more of an activist element. Tied to this notion of being close to the land, participants noted how they wanted to see 'tangible' results and 'Something real, something wild, somewhere peaceful and calm, surrounded by nature' (M. Watkinson, personal communication, February 1, 2022).

While all participants were aware of the need to be culturally sensitive and the importance of the Welsh language, a theme explored in more detail later on, Sioned (Llwyn Pur), was the only Welsh person amongst those interviewed, and as such was unique in the sense that OPD was a way to return to Wales after travelling and working abroad. Although she had explored the possibility of doing a similar project in other countries, such as Bulgaria, Hungary, and New Zealand, she and her family: ...really liked the idea of staying in Wales, language is really important to me, we get to live in Wales, and get to carry on that part of our history. We bought land just five miles away from where I was brought up. It is nice to think that there is that sort of link. When you are abroad, you have more longing for your own country, when you learn about other cultures, seeing people immersed in their own cultures and being proud of it, makes you prouder of your own' (S. Haf, personal communication, February 11, 2022). Contributing culturally and supporting the local community was a key motivator for Sioned, as she also cited that lots of services were being lost, including the nearby school closing some years ago. Affordability was another factor in pursuing OPD. With all participants citing the cost of small holdings, which is particularly prohibitive in England.

2.5.B. Application Phase

All participants feel writing the management plan for the planning application is a difficult part of the OPD process. The level of detail needed to create a robust proposal, and the technical aspects mean that applications take a lot of time to

complete, with most stating that it takes at least one year, with that increasing to as much as 2 or 3 years for others. The sheer amount of information needed, for example demonstrating the amount of vegetables that can be grown in raised bed by calculating sowing spacing and detail surrounding the behaviours of residents to satisfy the ecological footprint requirement, make it a learning process in itself. Management plans are routinely 80 pages long if not more, with Sioned remarking that it is '... like doing a master's degree'(S. Haf, personal communication, February 11, 2022). This was also raised by Erica and Chris, who shared concerns that it was easier for people with an academic background to complete an application. Meaning that many people without this background would struggle despite having the skills needed and being well suited to an OPD life. This was part of the reason why their application was submitted as a group. All participants feel that the application phase is a barrier for many to pursue the lifestyle.

In terms of acquiring permission and approval, there is considerable variation in participants' experiences. Dan y Berllan was rejected by the planning committee against the planning officer's recommendation for approval, with councillors questioning the ability of the land to sustain the families. This was eventually overturned at appeal, with the WG Planning Inspector ruling that it had been on unfair grounds and subsequently ordering the council to pay the costs. Despite the OPD policy being in place to accommodate sustainable living, the application phase proves to be challenging and to some extent demoralising for many applicants: 'The stress involved, it really crushes people in that first period, the planning application process, it is basically traumatising for a large number of people, the effort of having to do it, then the stress of having it judged and scrutinized, and councillors nit picking all these details of your life, that is really stressful' (E. Thompson, personal communication, November 11, 2021). This was also echoed by Tao who described how the process had left two of his most recent clients, who had approval eventually, '...incredibly disillusioned, incredibly pissed off, with deep bitterness and resentment' (T. Wimbush, personal communication, January 27, 2022). For instance, in one case it had been 3 and half years, something he sees as 'totally unnecessary'. In both cases the applicants were local people planning to live where they have always lived, with a wealth of experience and resources, leaving '...no reason for

local authorities to obstruct them, and smashing their dreams to bits' (T. Wimbush, personal communication, January 27, 2022).

'Traumatic' is a word often attributed to this initial process, with Sara (Coed Talylan), also attributing it to making her feel unwell: 'I was run down so much, I lost so much hope and energy, physically too, there is a small amount of trauma in my body that manifests as fatigue' (S. Tommerup, personal communication, December 12, 2021). In Coed Talylan's example, their application was unanimously passed by the Brecon Beacons National Park Planning Committee, who were very supportive: 'there was genuine interest, they all got up and shook our hands'(S. Tommerup, personal communication, December 12, 2021), however this is unravelling because of new legislation that they are being caught up in. The legislation looks at phosphate leaching and is being implemented by NRW. This would require them to test their soil annually using an agronomist to ensure the soil can hold the nutrients from the chickens and ducks that they keep, even though they have just 5 of each. This is a cost they cannot afford and is further compounded by other unforeseen issues regarding access and general difficulties of operating in a National Park resulting in progress stalling. As such they find themselves in limbo, with Sara highlighting the inflexible nature of the planning system: 'What we hear from the planners is that there isn't that nuance in the planning system to accommodate your arguments' (S. Tommerup, personal communication, December 12, 2021).

Despite these experiences and an overall perception that the application phase can be difficult, both Llwyn Pur and Swn yr Adar experienced minimal issues. For Swn yr Adar, the application went 'smoothly', with both Clare and James attributing this to a community consultation they hosted before applying. They also felt that they had applied during a 'sweet spot', not during the first wave where planners were trying to grapple with a new policy, and not in the most recent wave, where some OPD applications were viewed less favourably. Clare had also been quite persistent with the planning authorities to ensure that the application did not take too long, however it still took six months to pass, and nearly a year for the Section 106 to be signed.

Llwyn Pur has also experienced a relatively quick turnaround for their application and had also spoken with their direct neighbours before applying, with many in favour of the ideals of OPD.

Management plans are very thorough and extremely well thought out, and applicants certainly spend a considerable amount of time and effort to research and plan their OPDs, therefore it is difficult to attribute the reasons for such variation in experience surrounding the application phase. For Dan y Berllan and Rhiw Las, it could at least be attributed to the fact that their applications were submitted when the policy was still rather fresh, and the fact that it detailed four households might have alarmed local councillors. Coed Talylan has only stalled due to bureaucracy surrounding new legislation and possibly a case of it being misapplied to an OPD, demonstrating a lack of flexibility in the system. With Swn yr Adar and Llwyn Pur, it is possible that extensive community engagement has played a part, as well as perhaps, an element of luck in terms of location. The nature of their businesses could also be a factor, with both being more mainstream or conventional, in the sense that a market garden and vineyard is seen as more business-like and palatable than perhaps the microbusinesses of Dan y Berllan and the more niche ideas of Coed Talylan. In Llwyn Pur's case, Sioned being local, and part of the Welsh community could also be of some relevance, however the fact that other local people have struggled, as explained by Tao, does suggest that experiences with planning authorities are quite haphazard and unpredictable. This could also be due to the lack of training that local authorities receive, with the Erica in her role in the OPC offering training to planners to aid deeper understanding. Although praising the WG for creating such a forwardthinking policy, many felt that they had not seen the policy through, and that more support was needed.

Privacy is another issue raised by most participants, with many feeling that it is unfair to provide so much detail of your private life in a document that is in the public domain. For example, management plans include a detailed overview of family spending, such as on food, with a specific breakdown for different categories to the nearest pound, and precise details of expected travel, with further justification needed with regards to who you plan to meet and why.

2.5.C. Annual monitoring

A key aspect of OPD, is the ongoing monitoring that takes place, to ensure that participants are using their fair share of the earth's resources, stipulated as 1.88 global hectares. All participants that had reached the fifth year of their OPD had met their target of reducing their environmental footprint in line with the policy, although some admitted that they were by no means perfect but had the desire to learn more and improve (M. Watkinson, personal communication, February 1, 2022). Even those that were just a few years into the process such as Swn yr Adar, were also meeting the criteria, while Coed Talylan, despite not officially starting their OPD, were also essentially living one planet lives. Monitoring was accepted as part of the process by most participants because they recognised the need to measure their ecological footprint. All are sending in reports for each year as expected, while those just starting their OPDs stated their intention to fulfil this requirement. OPDs based in Carmarthenshire also state that they rarely, if ever, hear back from the planning authorities when sending in their annual reports.

Despite all OPDs complying, some issues were highlighted. Although Erica and Chris did not feel that creating the monitoring reports was difficult, as they were already managing their spending in a similar way, they did identify that they felt 'watched' and there was a perception that their situation was 'impermanent', resulting in a certain amount of trepidation about ongoing monitoring because of the threat that permission could be taken away and the exit strategy triggered. Clare and James stated that they were quite 'resistant' to monitoring at first but found it to be useful as a reflective tool for what they had achieved: 'Once I had done it, it was good to see our impact, we are keeping records of everything anyway' (C. Adamson, personal communication, March 4, 2022). For OPDs which are running a business that is perhaps more conventional there is a sense that monitoring is just an extension of the normal accounting process and is not seen as quite so onerous in these cases.

While Bee View Farm's annual reports were being acknowledged and audited in Pembrokeshire National Park, Matthew attributed this to on-going resistance on a local level, meaning that local planners were under pressure to evaluate their reports thoroughly, spending thousands of pounds on external consultants resulting in a 24page report on their 3rd year monitoring. He saw this ongoing monitoring as a problem for all concerned due to the amount of bureaucracy and felt that '…once you get to the 5 years, you've satisfied the criteria, that should be it, a lifetime of monitoring is draconian, it's crazy' (M. Watkinson, personal communication, February 1, 2022).

Regardless of whether participants agreed with the extent of monitoring or not, there was a feeling that the application process, the ongoing monitoring and the pressure of the initial 5-year setup phase was extremely taxing. Some had experienced 'burnout', due to the sheer scale of the task of building a business, cultivating enough crops to meet the targets of the policy and building a home, along with the daily routine of family living. For others, experiencing 'burnout' was a real possibility, and if they had not reached that point themselves, all participants could think of others that had or were experiencing this:

'OPDs do suffer generally with burn out, I can't think of anyone that isn't, at least in some way, overdoing things, all these targets and you've got to hit them, and there is no compromise, there is no opportunity to say, I can't meet them right now, I need to rest...' (E. Thompson, personal communication, November 11, 2021).

'The whole time you feel like you should be doing more, to make sure you're going to hit those targets, make sure you secure your planning permission and then you realise you've got to do it the rest of your lives. I don't want to live in stress of losing everything, if we have a bad year or if climate change messes everything up. The reason we are doing it, could turn out to be the reason we fail and the reason we lose everything (M. Watkinson, personal communication, February 1, 2022).

'To do this is hugely challenging, especially within 5 years, and if you've got to skill up and do everything else, it is huge pressure' (C. Adamson, personal communication, March 4, 2022).

'I do feel like I signed up to a bit more than I thought, especially getting caught up in new rules, it's not thought through. We are pioneers, it takes ages to build up, minutes are precious. The system we live in is rigged, not by any one person, systemically. This kind of activism, which it is, it is hardcore. I guess if you look back, lots of people have sacrificed their lives for change' (S. Tommerup, personal communication, December 12, 2021).

At times, some interviews felt like almost cathartic experiences, as participants were able to voice their concerns and sources of stress. Clearly, the application process, the following 5 years and ongoing monitoring takes its toll, so much so that although participants cited the benefits of living one planet lives and were achieving it, pressure from the outside permeates the experience.

2.5.D. General day to day living

As for the three case studies, both couples, Clare and James (Swn yr Adar), and Sara and James (Coed Talylan), work onsite and are engaged full-time with their OPD business. While although Erica and Chris (Dan y Berllan) are both involved, Erica currently works from home as a researcher, as well as on their OPD. It is not uncommon for at least one person participating in OPD to have a role outside of their land-based business, usually part-time, or working from home or possible involved in a nearby business. While Llwyn Pur is very much at the initial stages, they envisage Antonio working full time on the land, with Sioned also being heavily involved, although Sioned expressed a desire to continue working at least part-time as a researcher. This aspect was important to her as she was keen not to 'close ourselves off to the world'. This was a feeling echoed by all participants, as they wanted to continue contributing to wider society and ensuring that they were not 'just looking after ourselves' (S. Haf, personal communication, February 11, 2022). Even amongst those that are working full time on the land, there is a clear aspiration to inspire others, either by offering courses or volunteering.

Visiting the sites on multiple occasions across the year and observing and participating in some of tasks has enabled a thorough understanding of the day-today experience of living according to OPD principles and the seasonal differences in the tasks undertaken. It has shown that participants are deeply committed to living sustainably. Growing areas and polytunnels were well kept and packed with a huge variety of produce needed to sustain a varied diet for four people. It was observed that wild fruit and nuts (hazel in particular) were also being harvested in vast quantities to supplement growing. The capacity to produce more was being added through an additional greenhouse. Participants were shown to be very 'in-touch' and sensitive to their environment, highlighting the issues they had during the season due to lack of rain and high temperatures, and shown to be dynamically responding to these changes. Although relying on a car for longer journeys, due to a lack of public transport, these trips were significantly minimised, and the train use for long distance travel when possible. demonstrating that they are actively seeking ways to continue reducing their environmental impact.

When I first arrived to interview Erica and Chris at Dan y Berllan, it was early November, a cold snap has just begun and there had been an overnight frost. Even with no fire lit in the wood burning stove, something they avoid doing as much as possible, the house was pleasantly warm. Chris explained that the thermal mass of the house trapped a lot of heat, meaning they only needed periodic fires and they would also use that as a chance to cook using the multipurpose stove, something that they had researched heavily anticipating needing to rely on it on occasions. As discussed earlier, the home itself also looks 'mainstream', with Erica and Chris keen to emphasize that it was an important aspect if OPD is to be taken up more widely. Dan Y Berllan has most appliances you would have in a conventional home, such as a washing machine, electric oven, induction hob, fridge, freezer and TV. As such, all OPDs live or plan to live in conventional way, albeit not having the same convenience to instant and continuous energy that we expect, although this part is expected to become less of an issue with time, as it is hoped that future OPDs will connect to the gird (some OPDs are on-grid, but two thirds to three quarters are offgrid), and supply it with surplus energy, and draw from it when needed. The shift towards renewables supplying the grid will help facilitate this and ensure that it does not negative effect the ecological footprint of those living OPD lives.

One of the day's tasks was to deseed and start the drying process of chilli peppers that had been grown for seed on contract to a local seed supplier, with the chilli's themselves being used to create a sauce for storing over winter. The honey and apple juice had already been processed, so the winter jobs consisted of looking after the poultry, preparing the garden spaces and polytunnels for early planting and maintaining the winter vegetables. This was of course similar for the other OPDs visited, with Coed Talylan managing their woodland over winter, concentrating on growing in spring and mushroom inoculation. Swn yr Adar prepared their growing areas for spring, along with tending to their winter vegetables, before heading into the busy spring/summer period. The routines and day to day living for participants of OPDs are generally similar and would be recognisable to most smallholders, market gardeners or even small farms. All participants in the case studies, were growing much of their own vegetables and fruit to varying degrees, with all meeting and in most cases greatly exceeding their requirement of growing 30% themselves and supplementing this with a further 35% from their land-based business. It is important to note that during the initial 5-year setup phase, time that could be used to grow is taken up by house building and as such the ability to produce more crops and buy less increases with time. All made use of polytunnels/greenhouses to extend the growing season, and to help cover the hungry gap in spring and early summer. Here is an outline of a typical day in spring/summer at Dan Y Berllan:

Get up about 7am, breakfast, then Erica does the rounds of the poultry (letting out, feeding/watering) while Chris gets the kids ready and takes them to school on the electric bicycle. After getting back he puts the bike on charge, collects the day's eggs and spends the morning planting out seedlings in the polytunnel. Erica works on the computer. At 11 a customer comes to collect some hens and stays for a chat over coffee. If it is sunny, at about midday Chris bakes bread and Erica puts on the laundry to make the most of solar electricity, then they have lunch together, with a salad from the greenhouse. Erica keeps an eye on the batteries and when full, switches on an immersion heater to warm hot water in the afternoon. After lunch Chris inspects some of the beehives, then goes to collect the kids from school, taking a parcel of hatching eggs to the post office in the same journey. When back, the kids play outside with the neighbours' children for an hour while Erica attends an online school governor meeting and Chris makes dinner. This might be cooked on the induction hob or even in the electric oven if tomorrow's weather is forecast to be good, or they also have a menu of "low energy meals" for darker days which use less electricity. After dinner if there is enough hot water the children might have a bath. The wood stove has not been lit since March, so all of their hot water is dependent on the solar energy. Erica or Chris goes round the poultry again to shut them all up for the night while the other reads a book with the children. Then they

wash up and tidy, check the batteries and the weather forecast and plan the next day (E. Thompson & Chris Vernon, personal communication, September 29, 2022).

Managing energy needs in line with off-grid living does pose a challenge, especially during the darker months, as this limits the amount their solar panels could generate. As illustrated in the day-to-day living outline above, in spring/summer this was less of an issue but still quite high priority, if the weather was sunny they would find themselves with a surplus of energy after the batteries were full, and in a 'use it or lose it' scenario, usually opting to warm water in this case. OPD participants are constantly thinking about when to carry out tasks, such as baking when there is ample sunlight and even having evening meals which require less electric use or planning ahead to modify their behaviour in line with energy supply: 'We have to be hyper aware. What we have here is completely unsuitable for 95% of the population, it requires thinking, especially if you were out of the house 10 hours a day it would be difficult, we are here so we can micro-manage it (E. Thompson, personal communication, September 29, 2022). Another observation to note was that all OPDs managed their travel to ensure that any journeys taken were necessary, in order to keep their ecological footprint low, with all participants carrying out errands at the same time as taking their children to school for example, as well as using forms of transport which were low in carbon such as an electric bike.

The OPD lifestyle makes you more aware of your environmental impact unlike 'normal' life: 'We are dealing with our own waste, managing our own water, electricity, you are aware of causality of what you do a bit more; in a conventional house and lifestyle, you flush the toilet and don't know what happens, you put it in the bin and you don't know where it goes, you buy this in a packet and you don't know where it has come from or who's done it and what their lives are like, and it is about re-personalising life I suppose'(J. Scrivens, personal communication, December 2, 2021). Living a one planet life requires far more awareness of consumption and participants have to weigh up the options to ensure they keep their ecological footprint low, as Matthew (Bee View Farm) stated: 'We have to think about everything and not do most of it' (M. Watkinson, personal communication, February 1, 2022). This demonstrates that OPDs operate in a vastly different way to the general population, their overheads are kept small in line with the capacity of their business and purchases limited meaning that consumption is severely curtailed and therefore their footprint, as Tao remarked: 'OPDs operate on a completely different set of parameters, the priorities are different' (T. Wimbush, personal communication, January 27, 2022).

Unsurprisingly all participants described living the OPD life as hard work, due to the physical nature of lots of the tasks and the fact that less machinery could be used to ensure a low carbon footprint, although this was more of a concern for Clare and James, due to the nature of their business. This aspect was of course anticipated by all participants but tempered by the fact that most had been pursuing these activities before seeking to live in this way. Conditions seemed to be particularly hard at Coed Talylan, as the participants were living in temporary accommodation over winter. Despite certain hardships related with the way of life chosen, participants were very happy and cited that the benefits far outweigh the negative aspects which was mostly related to bureaucracy.

Participants were keen to mention the positive impact living sustainably had on their mental wellbeing, tying this to being closer to nature and the land, and seeing the impact they were having on their immediate environment:

'During lockdown, thank god we were here. Being able to be out there, in nature, in the quiet, the still and the beauty, if I've had a hard day, I just need to go outside and sit under a tree, I get my hands in the soil, it is very grounding and earthing, really good for our mental health, there are certain times when I think, why are we here? But I wouldn't change it.' (C. Adamson, personal communication, March 4, 2022).

'It has been massive for my mental health to live here. It is great life, it is lovely' (E. Thompson, personal communication, September 29, 2022).

'You have got to earn it (about having the right to OPD), it is bloody hard work, but I love the lifestyle, we are pretty free as far as western citizens go. We are our own boss really, not beholden to anybody, no bills, just council tax. It is very rewarding to see the impact we are having, as trees we have planted develop, radically changing the environment' (J. Adamson, personal communication, March 4, 2022).

Five of the OPDs interviewed also had young children and being out in nature was associated with good health, with many seeing the OPD life as a 'brilliant' way for children to grow up, as they also had freedom to explore the land, and in the case of Rhiw Las, the other families also have children, and are called in by ringing a dinner bell: 'It is great for the kids, they are feral, especially having others next door' (E. Thompson, personal communication, September 29, 2022). Although some did worry about how their children might be viewed, if friends visited, and saw a slightly different way of living, for example how the toilet worked differently.

2.5.E. Community inter and intra-impact

As all OPDs are individual developments, rather than eco-villages, a characteristic that will be discussed later, the connections between them are quite loose. While Rhiw Las could be seen as a small OPD street, Erica sees them as a 'community to with a small 'c', and little was bought between each other, although some things were shared and swapped, and if there was a glut, they would make sure it was distributed. For example, the OPD opposite Dan Y Berllan make oat milk and the oats left after the process are given to their chickens but also given to Erica and Chris for their poultry. Lifts to places are also shared and the children play together, but there is little evidence of communal work for example. The same applies for Swn yr Adar, despite being in an area dotted with other OPDs, and being in a close proximity to Lammas. While there is little exchange between them, there are OPD gatherings to discuss various issues such as OPC meetings, with a degree of idea exchange taking place and collaboration in terms of organising open days, tours and courses. OPDs seem to operate very transparently, with regular open days for the

public and courses tailored to those wishing to pursue one planet lifestyles. Indeed, as has already been discussed, the severe local opposition experienced by Bee View farm has not stopped them opening their home to the public and the media. This desire to engage with the local and wider community suggests that rather than a more insular 'survivalist' trait or alternative/hippies dropping out associated with this form of living.

'It is not just the value of the place to us, but to local people too' (James Adamson, personal communication, March 4, 2022).

Though there is an onus on OPDs to participate in the community most OPDs were looking to engage as part of their plans in any case. Swn yr Adar have plans to widen the scope of their project and share their place with others, noting its 'specialness' and its ability to have a 'profound impact' on people. They did not want to isolate themselves: 'What we don't want to do is get ourselves sorted, put a fence around it and then say we are fine, screw you. We want to make it available to people.' (James, Adar). This is also highlighted by Coed Talylan: 'we sow a seed in people's minds, and they start thinking about how they live' (J. Scrivens, personal communication, December 2, 2021) and Llwyn Pur, with Sioned stating their intention not to emulate the bigger vineyards abroad but rather be small scale, offering a similar experience to the cider trails in Herefordshire: 'it would be cool to have OPDs doing lots of small, interesting stuff, you create a trail between them' (S. Haf, personal communication, February 11, 2022).

Whether some of these ideas would serve to attract the local community is hearsay but open days do seem to draw members of the public. The issues of community integration is seen to be quite a difficult thing to achieve, with Erica and Chris, although agreeing with the importance of it and its cultural resonance, alluding to the difficulty of defining the concept of community and the extent to which one even existed, especially in rural areas: 'Community integration is a tough one, what is that, what is community these days?' (C. Vernon, personal communication, September 29, 2022). This was also raised by Sara and James, who struggled to clearly define the community that did exist except a semblance of one connected to the local school, which has showed itself to be 'quite cliquey' even by local standards. This served the argument surrounding the difficulty of pursuing OPD and the broad scope of its remit, with Erica remarking that: 'OPD has to do all those things, a lot is asked of it' (E. Thompson, personal communication, September 29, 2022).

2.5.F. Culture and language/Identity

The way participants feel they are viewed by those external to one planet living will be dealt in its own section, however a topic that surfaced with regards to community integration was Welsh language and culture, and the negative narrative that surrounds OPD with regards to it, the perception being that it is the preserve of English people moving to Wales (an issue which will be explored in more depth in chapter 6). As discussed earlier, Sioned (Llwyn Pur) was partly motivated to do an OPD because of the chance to go back to her community and the importance of native languages, and addressing this subject, admitted that the balance was probably off and that there was an element of truth that uptake amongst those 'indigenous' to Wales had been limited at least amongst OPD participants that she knew (S. Haf, personal communication, February 11, 2022). Most participants agreed with this statement, with Matthew (BeeView farm) stating that the policy seemed 'skewed to English people with a passably academic background', although he felt that the policy was for Welsh people and 'not people like me' (M. Watkinson, personal communication, February 1, 2022). Sioned attributed this scenario to being part of the wider trend that environmental policies usually attract white middle class people from urban areas (S. Haf, personal communication, February 11, 2022).

Despite there being an awareness of this debate, no participants had directly been subject to anti-English sentiments. Indeed, participants were shown to be incredibly sensitive to issues of language and culture, even though that they had partly been motivated due to global issues, not unlike the OPD policy and the wider remit of making Wales a one planet nation. Participants were conscious of the historical connotations and the largely farming communities they had moved into, and recognised the 'wound' in Welsh culture, such that many were trying to integrate as much as possible. Many felt that OPD had got off on the wrong foot, as early media attention had framed the policy wrongly, with one news story running with the title: 'Want to save the planet, move to Wales', something which had irritated participants with its 'imperialistic' undertones. Also, many pointed to the general narrative surrounding second home ownership and holiday homes which was weaving its way into the anti-OPD narrative. Some participants also raised issues about the Welsh language, feeling that those external to OPD which were raising these issues were possibly using it as an acceptable way of criticising the policy, rather than a legitimate concerns, rather it was stemming from OPD being different and a threat to the way things are and using languages was a politically acceptable way of criticising the policy and those participating in it.

2.5.G. Perceptions of those external to OPD

In addition to concerns about Welsh language and culture, and earlier points made about the relationship with local authorities with regards to the application phase and annual monitoring, this section incorporates further detail regarding how participants feel they are viewed by those external to it, a key aspect of understanding what is happening on the ground with OPD. This will lead into chapter six which explores perceptions from the outside.

All participants experienced varying levels of scepticism when they initially applied or started their projects. For Clare and James, people were dubious at first but were quite accepting once they had put their case in front of local inhabitants, focusing on their intention to work the land. Their proximity to Lammas is of some note, which on some level may have helped their case, as local people are already likely to be quite familiar with something considered 'different', however there was a perception that they had been 'lumped in' with Lammas, and residents had conflated their ideas with the notion of an eco-village. This meant that Clare and James had to explain that they wanted to immerse themselves in the local community, rather than create their own separate group. Similarly Dan y Berllan and Rhiw Las experienced some strong resistance at the beginning, including from the local community council, but despite still feeling 'watched' to a certain degree, they feel that residents have come around to the idea, also noting that anyone new to the area are fine with their presence and are quite interested in what they are doing, supporting the idea there is only an initial fear of OPD as something 'different' and 'alternative'. While things had calmed for most participants, Matthew (Bee View Farm) still feels 'hounded' and said that there was an active 'smear campaign' against them. Despite wanting to show evidence that they are living one planet lives and using the land productively, he feels that this falls on deaf ears as 'nobody wants to be proved wrong' and this was something that they feel they could not resolve. He sees this as deeply unfair, as they as a family are trying their best, living sustainably but being judged: 'we have to record every god damn receipt, and think long and hard about every decision and they can do whatever they like, they can fly off on holiday whenever' (M. Watkinson, personal communication, February 1, 2022). This could be due to several factors including their location, their home being upcycled and less 'conventional' looking than other OPDs, as well as more media exposure.

Addressing concerns some councillors had made about the ability of the land to support them, all participants could see how those from an agricultural background would struggle with the concept of OPD working on such a small scale, highlighting that conventional farmers saw things from a different angle and that OPD could be seen as a threat to 'their way of doing things' and their 'way of life', despite it being tiny in terms of land currently used:

'It's challenging for the status quo. If you present a permaculture system to them and its doesn't involve a massive tractor, pesticides and fertilizers, it's a totally different way of thinking. We've had so many local farmers tell us: 'you can't grow anything up here!' That the land is only good for sheep or cattle or horses, and they are utterly convinced, partly because they are protecting themselves, protecting their own assumptions about how the world works' (M. Watkinson, personal communication, February 1, 2022).

This was something that Swn yr Adar were trying to overcome, as farmers visiting their OPD had been surprised that both were working full-time on the land and did no need an income from a job offsite, as well as the techniques they were using to make the land more productive. All participants sympathised with the situation farmers faced and their importance of feeding the nation, alluding to the pressures they would be experiencing, especially considering Brexit. Further rural issues such as second homeownership and the perceived impact on communities was also seen as feeding into the narrative. Many suggested that the issue of farmers wanting to build an extra dwelling on their property for the next generation could indeed be solved by OPD but this was not going to happen as farmers were coming from a different standpoint and that it could even be a 'generational thing' (J. Scrivens, personal communication, December 2, 2021). However, some felt that the scepticism they faced was unfair, and saw the position farmers held that only they knew how to produce as biased, and that considering OPD's minuscule share of land, should be seen as something 'exciting' and 'interesting' rather than the 'monocultures' which normally characterised the countryside. James (Coed Talylan) also questioned how meaningful getting below 1.88 global hectares was as a key indicator of one planet living and that a different metric might be more accessible, suggesting that it was difficult for people, as something not 'tangible', leading to confusion and misunderstanding around the policy (J. Scrivens, personal communication, December 2, 2021).

Despite there being an awareness that OPD was sometimes viewed as not possible, especially by those working or with a background in agriculture, as well as perceived ideas about the 'type' of people that were pursuing sustainable lifestyles, all participants advocated the role OPD could play in several different areas, and the need for it to be championed (S. Haf, personal communication, February 11, 2022). Participants pointed to the way it could complement agriculture and sit alongside it, and that it was not an 'alternative hippy lifestyle' (S. Haf, personal communication, February 11, 2022). They saw the policy's potential to show that people can live sustainably but not in a regressive or 'backward' way and help change how people normally do things (S. Haf, personal communication, February 11, 2022). This was typified by the comfortable and well-designed OPD homes that the participants in this research had built or planned to.

Chapter 6: OPD from the Outside, 'Like giving the key for the hen shed to the fox'.

Following an exploration of the experience of those living one planet lives, this chapter now turns to how OPD is being interpreted and debated with from the outside. To construct a more thorough understanding of the experience of OPD and to better understand how the policy is being engaged with, this chapter leads on from the contextual framework provided in the literature review and chapter four which outlined the OPD policy itself. It draws from a diverse set of perspectives of those external to OPD via interview and secondary sources as explained in the methodology, to those 'looking in at' those wishing to live and living in accordance with the policy, as well as their feelings and perceptions of the policy itself. It also explores the possible issues shaping these viewpoints and how interactions feed back into the experience of OPD. Rather than sequentially dealing with each interviewe according to type, this chapter pulls together all voices from different perspectives under headings which loosely correspond to the issues and points raised by the participants. This is justified due to OPD having to contend with several issues from all directions and the aim of this research being an overview of this playing out in reality.

Issues and Challenges

3.1. The Pressure on Agriculture

The tension caused by the policy was evident in my interviews with farmers, and councillors (especially councillors with a farming background). Most were more than happy and eager to make time to discuss OPD at length. That is not to say that the policy was universally familiar to all, for example, some farmers approached for this study, were only faintly aware of OPD or would conflate the policy with low impact developments such as Lammas or Tipi Valley. However, even with a surface understanding of what OPD aimed to do, almost all raised issues with the policy or indeed those participating in it.

Given the historical goodwill towards farming, the farmers interviewed still portrayed themselves as the custodians of the countryside and were emboldened by increased interest in the need for food security and their important role in this. What was most notable from the outset, before going into the details and concerns with OPD, was the feeling that they were defending their position and that farming was being attacked. With heightened awareness around climate change, the impression was that the traditional narrative was changing at a rapid pace. The first farmer interviewed was Gareth Thomas, who is also a councillor and a member of the planning committee for Carmarthenshire County Council (CCC). It was quite clear from the outset that he was dubious of the policy, evidenced by a debate over a recent OPD during a planning committee meeting which had elicited a strong response amongst some councillors. In response to OPDs aims, Gareth strongly advocated farmers 'role in the countryside:

'I know what it is like to work with nature, we live in the cycle of nature, in a big, big way, if I don't get that right, hundreds of animals will starve or suffer. We are unique for the size of the farm, that we keep doing things they used to do, we keep chickens, slaughter lambs and freeze them, use all the meat. Salted pork, everything we had for Christmas dinner came from less than five miles away' (G. Thomas, personal communication, January 20, 2022).

This was something I heard repeatedly from other farmers interviewed also:

'We do our best here for the environment, people forget that I know all the details about the land, most of the fields have names' (Farmer 2, personal communication, October 10, 2022).

'I know what grows best and where' (Farmer 3, personal communication, October 10, 2022).

There is a sense that not only are the ideas surrounding OPD slightly grating for farmers, but that they are defending their position in the countryside in juxtaposition to it. This point was echoed by Jane Davidson (J. Davidson, personal communication, March 3, 2022) who pointed to the fact that the very nature of having something like OPD challenges existing farming practices and elicits a response in the media despite agriculture making up a very small part of the overall economic output of Wales. Regional Accounts: Office for National Statistics (2022, June 1). They strongly put forward their credentials even though their farms had strayed away from traditional practices due to the need to stay profitable. The feeling was that they wanted to be shown as authentic and qualified to voice what are quite strong opinions; that the ideas in OPD were not new and that they were just as aware of issues with the environment. Clearly some of the backlash OPD faces are part of this ongoing battle between farms needing to increase their output, becoming larger but also the proposition that future subsidies will likely be dependent on benefiting nature more generally, such as tree planting, as those proposed in the Sustainable Farming Scheme, scheduled to begin in 2025 (Welsh Government, Sep 2022).

Further to the feelings farmers had about their place in the countryside and how this partly frames their attitude to OPD, there was also concerns about their future and their way of life, which they equated with initiatives like OPD, grouping them together as one force that they saw as quite hostile to how things are normally done in the countryside. The range of quotes here serve to illustrate the concerns farmers and those with agricultural backgrounds had regarding accelerating changes:

'I've spoken out against solar panels on farms. We are losing farms all the time. We import 40% of our food and we are putting more farms under solar panels. We are taking out more capacity, and then where do we get food, from the other side of the word. A good dairy farm locally has been put under solar panels' (G. Thomas, personal communication, January 20, 2022).

'What about this rewilding business, they haven't got a clue, they will buy up land that is needed' (Farmer 1, personal communication, October 10, 2022).

'It's the publics fault for the way we are farming, we are being forced down this route. Going to Supermarkets and demanding cheap food. Everyone has an opinion on food' (Farmer 3, personal communication, October 2, 2022).

'There is a massive pressure on farms, got to go bigger, because the public wants cheap food.' (Farmer 2, personal communication, October 10, 2022).

Further to this, interviewees were concerned about the effect things 'like OPD' would have on communities:

What do you want in the countryside, are we going to grow food, or sell off bits of the land to plant trees for businesses to offset their carbon but the government can say, we are doing this for the environment, but we are losing farms, so we are losing families, if we lose families, we lose children, if we lose children, we lose schools, if we lose schools, we lose teacher's jobs, that money doesn't circulate in the countryside (H. George, personal communication, March 3, 2022).

It was clear from the interviews, that an obvious theme was the increasing pressure felt by farmers not only about their practices but the possibility of physical changes to the land as a result of green initiatives. While there was almost an admission from some that they were aware of how damaging some of their practices are, they did not see a different route. The globalisation of the food market and ongoing volatility with regards to Brexit was also cited, with the threat of cheaper imports making them uncompetitive, serving to further undermine their livelihoods. These issues added fuel to fire and discussing OPD provoked quite an impassioned response, one that far outweighs the impact of the policy so far and its future reach, suggesting that OPD was to some extent being conflated with wider issues and seen as yet another thing thrown at the countryside.

It is interesting to note that OPD was launched alongside the Rural Enterprise Dwelling (RED) at the Royal Welsh Show in 2010 with the intention that some young farmers would go on to do OPD (J. Davidson, personal communication, March 3, 2022). RED is another scheme which allows farmers to build on their land with an agricultural tie albeit after proving a certain profitability after five years (J. Davidson, personal communication, March 3, 2022). However, the message did not really chime, the response at the unveiling was quite 'muted', with Jane Davidson admitting that 'as farming in Wales is beef and sheep, and not growing anything', it was not attractive, as you could not keep enough sheep or cattle on a small amount of acreage (J. Davidson, personal communication, March 3, 2022). This also begins to indicate why those from agricultural backgrounds question the workings of the policy. It is clear to see that they feel that their value and way of life is being attacked and eroded, and although OPD does not threaten farming given its miniscule share of land, its aspirations are being wrapped up in initiatives such as carbon offsetting and rewilding. These concerns feed into the resentment and further serve to frame the resistance to it, this of course feeds back into the experience of living OPD itself and the narratives around it.

3.2. Misunderstanding the policy: 'The road to hell is paved with good intentions.' (Councillor 1, personal communication, May 5, 2022)

These pressures and questioning of farming practices, and how it frames the response to OPD, is evidenced in the tension between Councillors with and without a farming background in recent Carmarthenshire County Council Planning Committee meetings. An example being a debate regarding an OPD application in late 2021, which sought to grow vegetables on a three-acre holding alongside another smaller music therapy enterprise. The application had forty-three letters of supports to nine objectors and had been recommended for approval by the planning department (Youle, 2021). However, it was subsequently voted against during the committee meeting. The debate and comments made are illustrative of the sorts of issues that councillors with a background or active part in agriculture have with the OPD policy. Councillors against the application rejected the need to live on the land, with one pointing to the availability of allotments in the nearest town and remarking that he had: '...never heard of anyone sleeping in their allotment to grow vegetables' (Webcast, Oct 14, 2021). While another posited the idea that the applicants should instead live in an existing house nearby, which made it carbon free, as it would have been there for a hundred years already (Webcast, Oct 14, 2021). These sorts of sentiments were echoed in many of my interviews:

'It is such a loose policy, you can now have a person with an acre of land, grow potatoes, or pickling cabbages, like we have here, and they have permission to build something to live in and for work' (H. George, personal communication, March 3, 2022).

'Most of them don't need to be there and live there' (Farmer 2, personal communication, October 10, 2022).

Here, it seems that there could be misunderstandings regarding the finer points in the policy, as the land-based business and the overall land management plan assumes the need to live on the land and that the dwelling is the sole residence of the one planet practitioner (Welsh Government, 2012). It also alludes to the difficulty of being fully aware of all the requirements and considerations related to OPD, a point referred to by CCC planning department (Carmarthenshire Planning Department, personal communication, March 30, 2022), who explained that the 'complexity' of the policy made it difficult as the practice guidance contains a considerable amount of information. In Pembrokeshire planning committee meetings, there have been examples of this, with Planning officials needing to explain the difference between OPD and RED, with a tendency for Councillors to treat both policies the same (Webcast, May 21, 2019) Also, few applications come before committees (just 42 OPDs sites have been given permission since 2010, as mentioned previously), so there is some scope for elements of the policy to become unfamiliar during this time. However, it is not unreasonable to argue that key points regarding the policy should be well embedded and understood ten years into a policy, regardless of how often OPDs are debated. Although some degree of confusion could be playing a part, the example above is perhaps more illustrative of embedded views on development in the countryside, prompted by the well-established planning rationale, discussed at

length in the literature review, that restricts building. Even though OPD is an exception in this case and sits outside of the Local Development Plan (LDP), it is not being understood by some, with one councillor saying that trying to explain this concept was 'like hitting my head against a brick wall' (A. Lenny, personal communication, November 9, 2021). While others viewed it as 'undemocratic' as OPD is imposed on local authorities from above (H. George, personal communication, March 3, 2022). Views of what is and is not allowed in the countryside is therefore still heavily influenced by the ongoing legacy of the Town and Country Planning Act, irrespective of the exceptional nature of OPD.

Needing to live on the land was seen as unfair, since one group of people could live on the land based on the promise to carry out their management plan, whereas those in an agricultural situation needed to prove that their business was working before having permission such as the case with RED. Gareth Thomas gave an example of this explaining that a small 90-acre farm on the Welsh borders that wanted to build a house, had kept their accounts for five years showing that it was profitable but were ultimately rejected because of worries that things could go wrong, 'while with OPD, there is no need for a track record to live there' (G. Thomas, personal communication, January 20, 2022). The tendency to discuss these points also speaks of a more general dislike of the policy because of what it represents rather than the quality of the applications at hand. Referring to the application that was denied in Carmarthenshire discussed earlier, it was gradually more evident as the meeting progressed, that it had become more about perceived failings of the policy itself and it became increasingly bad tempered. Frustration was palpable amongst the legal representatives for CCC and the chairman, who highlighted the need to put forward an argument based on the material considerations of the application and whether they comply with it, rather than issues with the policy itself. (Webcast, Oct 14, 2021)

This unfairness was a recurring theme, especially with regards to farmers' situation and the perception that the criteria for RED was far more severe that OPD: That's why local people are not against the individuals but against the policy that says, if you live in a caravan, you can have whatever you want, but if you run a farm, you can't. (Councillor 1, personal communication, May 5, 2022).

It is not fair to allow one group of people to live somewhere and prove they can make a few thousand, but a farmer must show that he can make thirty thousand, those doing OPD are looking after themselves, farmers are looking after everyone else. The rules are not equal. The same opportunities should exist for each. (H. George, personal communication, March 3, 2022).

It should be noted that these comments were made in relation to some OPDs only, and both councillors had praised other OPDs that they saw as a success, but rather their issue was a perceived unfairness in the policy that allowed some OPDs to continue despite what they saw as evidence of not living in a way that the policy intended. However, there are glimpses of a backlash against people moving back onto the land as smallholders, and a perception that it is certain type of person that is looking for personal gain. Again, the root of these opinions draws on the strong cultural idea of farmers feeding the nation but being forgotten or treated unjustly.

This notion of perceived unfairness also extends to local people, a common opinion amongst councillors in rural areas, for example Councillor Dorian Phillips, who had already experienced OPDs setting up in his Llanboidy Ward, offered an example of this unfairness when a local Welsh couple failed to secure permission to build a bungalow on their seven acre holding, which they eventually sold to another couple, who subsequently were able to get planning permission under OPD, this led to 'frustration' and the assertion that '...there is one rule for some and one rule for others' (Youle, 2020). Others cited examples of farmers growing older, and their children coming back to look after the farm, but no allowance for them to move into a small cottage on the farm which could facilitate succession (H. George, personal communication, May 5, 2022). This view that OPDs do not need to live on the land has also been raised by local residents, with a particular case in Pembrokeshire where local residents spoke at a committee meeting citing that a lack of public transport in the open countryside and seeing a prospective OPD as 'an elaborate attempt to get a small holding on the cheap...it is in the wrong place, [amongst] the magnificent countryside'(Webcast, May 21, 2019). This is another example of harnessing the powerful imagery regarding the countryside, and the prospect of an OPD eroding this, whilst also questioning the intentions and commitment of those applying.

These perceived issues with the policy led to Carmarthenshire Councillors calling for a moratorium on the OPD policy, to allow time for it to be reviewed (Youle, 2020). This motion to halt the OPD scheme cited that the policy was overriding the local development plan leading to resentment by residents in rural areas, who are unable to get permission to build on their land and the difficulty of monitoring OPDs given that local planning authorities did not have the expertise to evaluate outcomes, an issue that will be discussed in more depth later (Youle, 2020). Although councillors overall backed the environmental goals of the policy, the fact that OPDs could be allowed planning based on projections rather than producing evidence of its viability over many years, was not creating a level playing field (Youle, 2020). This need for a review was supported by most councillors interviewed albeit for differing reasons.

It was explained in the methodology that exploring the views of those opposed to OPD would be much easier that discovering the voices that generally support it, especially amongst farmers and councillors. This has been somewhat borne out by the experience of this research, for example many councillors approached were rather neutral in their opinion towards OPD, recognising its value but also seeing the need to review it given the tension it caused, while some had no opinion or could not recall an experience with the policy, despite being on a planning committee (Councillor 1, personal communication, May 5, 2022).

Of those that generally agreed with the policy, there was a recognition that things needed to change and OPD was one way this could be facilitated and explored: 'It's a good start, gives people a chance, we need use the land, and we need to live differently at some stage' (D. Cundy, personal communication, February 4, 2022), 'It is an opportunity, they want to make a go of it, they are the ones sacrificing to do this' (Webcast, 14 Oct, 2021). While others against the motion in Carmarthenshire, citing how it was irreconcilable with the council's overall aim: 'If initiatives such as one planet developments are not championed...how on earth is Carmarthenshire Council going to achieve net zero carbon status by 2030?' (Youle 2022)

3.3. The viability of OPDs

Following on from the perception that OPD generates an unfair situation given that it allows people to live on land that is normally highly protected, there is a degree of disbelief amongst some critics of the policy that the amount of land and the quality of it normally included in applications would not be conducive to success. They question how sustainable they could be and whether they will live 'one planet' lifestyles. The majority of OPDs are indeed 10 acres or less, with most being around 5 acres (One Planet Council, 2022).

Drawing on the example of the Carmarthenshire planning committee meeting, discussed earlier, the application was made on land that one of the councillors (that was also a farmer) had in fact farmed in the past (Webcast, 14 Oct, 2021). The land was described as quite wet, and not suitable for much except the production of silage and had been named as such by the farmer as 'Cae Garw' (meaning Rough Field). Although the applicants were remedying this by installing raised beds, with a view to improving soil quality over time, councillors with farming backgrounds were adamant that the land would not sustain them (Webcast, 14 Oct, 2021), with one interviewee explaining that for him, raised beds would never produce what a family needs, and the fact that they would need to bring in compost was 'not very environmentally friendly'(Councillor 2, personal communication, May 5, 2022). The general viability of OPDs to live off the land had been repeatedly questioned as Councillor Howell outlined:

'It's not suitable to live off market gardening on just eight acres. The question has been asked, why don't local people apply for one planet development permission? The simple answer is that local people know that they will not succeed under the OPD plan' (Youle, 2020). Rhiw Las, as discussed in Chapter Five, went to appeal because the amount of land included in the application (21.5 acres) was judged as not sufficient by some members of the planning committee (E. Thompson, personal communication, November 2, 2021). While some OPDs which are exclusively horticultural have had their feasibility questioned on the basis that an animal would be needed if you want to '...make one planet a success. No if no buts' (G. Thomas, personal communication, January 20, 2022). These views reflect that the OPD policy and its participants are being judged from a farming perspective and scale, which limits what they see as possible on such small parcels of land. This is encapsulated by the following statement:

'We need to be 600 acres here, to keep 2 families, 3 workers and we are still working 18 hours to be profitable. If we went down to 60 acres, one of us would have to work full time and the other part time. To be economically viable.' (G. Thomas, personal communication, January 20, 2022).

It is understandable in this case, that the proposition of OPD working when farms are increasing in size and many farmers are struggling to make a profit, even with the help of subsidies on much larger pieces of land, that there would be a lack of understanding about how different the OPD model is, echoing the earlier point made by Jane Davidson that it is challenging for farmers (J. Davidson, personal communication, March 3, 2022). Therefore, small-scale projects are looked down upon in conventional agriculture, an argument that has been made by several councillors interviewed when accounting for the general attitude towards OPD (D. Cundy, personal communication, February 4, 2022; A. Lenny, personal communication, November 9, 2021). Again, there are also glimpses of concerns regarding the future of farming in response to greenhouse gases and the shift needed to combat these, meaning that '…they turn their noses up at small scale, but that is the way it might have to go' (Councillor 3, personal communication, May 5, 2022).

There is also a more general point to acknowledge here, regarding the type of land available for OPDs and their suitability, as one farmer that was more sympathetic to it and was considering putting some land up for sale stated, 'often the land that goes on sale, are the bits that are not so good', hinting at the lack of availability of good land for OPDs to start with (Farmer 4, personal communication, October 2, 2022). It is also worth noting that the planning consultant that participated in this research had come across potential applicants that were trying to make their project work on unsuitable land and he had rejected the possibility of developing the project further given that it would not be possible (B. Knight, personal communication, February 16, 2022). Therefore, there are at least some instances of potential applicants trying to situate their projects on poor land and not being aware of the challenges they would face to grow enough food, which demonstrates that concerns that some farmers and councillors hold are not completely unfounded. However, issues regarding affordability, which will be briefly discussed later, may also be a factor.

While those from more traditional farming backgrounds struggle with the concept of OPD and how it works on such a small scale, there are councillors that are aware that it operated differently and had the ability to overcome issues of poor soil and make better use of the land available, with one stating that 'OPD...it's a different thing altogether, families can live off this kind of thing, you can make money out of it. So, per acre, its far more productive in that way' (D. Cundy, personal communication, February 4, 2022). While the famer that was more open to OPD's ideas expressing interest: 'I'd like to see if it is possible to live off some of the land that has had permission' (Farmer 4, personal communication, October 2, 2022). Those not viewing OPD from a conventional agricultural standpoint pointed to the ability of OPDs to manage the land differently using different design strategies such as permaculture and techniques like 'no-dig', which had been proved on pieces of land as small as a quarter of an acre for a market garden (B. Knight, personal communication, February 16, 2022). While others cited other projects in west Wales such as the eco-village Lammas and how it had massively improved productivity with smallholding management, compared to when the land was used to graze sheep, especially given that it was marginal and, on a hillside (J. Davidson, personal communication, March 3, 2022; D. Thorpe, personal communication, March 1,

2022). While it had supported one family with subsidies before, it was now supporting nine families working the land without subsidies: 'Farmers will say that you can't do anything else with this land, and we know it is not true...that's what people need to see' (D. Thorpe, personal communication, March 1, 2022). Underlining the validity of OPD's approach, Jane Davidson argued that:

'OPD...is very much about pioneering use of the land, agro-ecologically...so when traditional farmers say- you can't get anything out of this- it is wrong, you can, but you have to use completely different techniques to the ones they have grown up with' (J. Davidson, personal communication, March 3, 2022).

Taking up the point made by David Thorpe regarding needing to 'see' this approach, there is also a practical reason that holds back OPD. CCC planners confirmed that site visits are not carried out as a matter of course and that this had been further restricted due to Covid since March 2020 (Carmarthenshire Planning Department, personal communication, March 30, 2022). Although some councillors had made site visits before the pandemic to potential OPD sites, notably they had only visited before the applicants had permission, so very little had been done with the land. Of course, with normal applications, this would be the usual routine, as other than the inspections to comply with building regulations, once the building is complete, the relationship with planning authorities effectively ceases, while with OPD, there remains an on-going connection via the annual monitoring reports. So, although, councillors were in that sense following the convention, it is surprising that so few had been to follow up and see what the results were, given that it takes several years for OPD practitioners to setup their business, start increasing biodiversity, growing food and building their home. Especially since there are opportunities outside of official channels, the OPC organises open days for example, with prospective applicants and any members of the public often welcome. As well as not being the norm, it could be time constraints that hinder than post-approval engagement or a lack of awareness that OPDs operate quite transparently. Although it could be considered conjecture, the fact that few councillors visit OPDs despite being somewhat sceptical of the policy, could be attributed to not wanting to be proved

wrong or not being open to the possibility that OPD can work. Lammas conduct regular tours during the year and anecdotally they are visited by '...the frowning councillor at the back or the grumpy farmer, and invariably, by the end of the tour, they are wide eyed and they are smiling' (T. Wimbush, personal communication, January 27, 2022).

3.4. Historical subtexts

Tangled up with the notions that OPDs are not workable, it is quite clear that some councillors and farmers were equating OPD with past experiences with other more radical rural geographies, such as the 'alternative' and 'otherness' aspect that is associated with west Wales (Halfacree, 2011), with one councillor worried about the cumulative effect of the policy, as Pembrokeshire was seen as a 'hotbed' for this type of development (Webcast, May 21, 2019). This image is drawn upon by critics of the policy, for example, Councillor Ken Howell cited the experience of 'hippies' which had to move away from the area after just five years due to not being able to grow food, remarking:

'It's so frustrating, as a farmer, to read some of these (OPD) applications, because I know they don't stack up and they will never succeed. I go back to the 70s when we had an influx of what were known at the time as the 'good lifers', also known as hippies, who descended on this part of the world and bought up dilapidated cottages and smallholdings and thought they could live off the land.' Carmarthenshire is famous for growing grass because the climate is suitable, and the soil is suitable'(Youle, 2020).

This was something alluded to by many participants critical of OPD and those pursuing it, there was a general feeling that the notion of sustainability had been romanticised and that it was images of the 'the good life' which were motivating people to explore OPD, rather than a steadfast commitment to living a sustainable life. Issues were also raised with regards to the Lammas ecovillage, with a Pembrokeshire planner citing the 'untidiness' of the site in comparison to how farmers keep their land tidy, and the lack of Welsh spoken as indicators of issues that could be associated with OPD (C. Jones, personal communication, January 25, 2022). Echoing these, there was also a perception that OPD could be suffering from an image problem, with David Thorpe citing that the Roundhouse (Tony Wrench's home) pictured on the front of the OPD Practice Guidance needed to be updated now that there are examples built to the requirements of the policy, as the image was synonymous with hippies (D. Thorpe, personal communication, March 1, 2022).

Although some were conflating OPD with the historical instances of alternative living in Wales, this was not a view expressed by all, with councillors broadly supportive of OPD suggesting that this was predominantly an issue that those from agricultural backgrounds harboured, as OPD was seen as different: 'Farmers feel perhaps that- that OPD are a load of hippies, coming down and setting their wigwams up everywhere and that's it, but that isn't the case' (Councillor 1, personal communication, May 5, 2022).

Dovetailing with concerns that OPD practitioners will fail in their aims as others had done in the past, doubt was also raised surrounding the intentions of potential and existing OPDs.

Especially amongst the most ardent critics of the policy, there was severe misgivings about the type of people the OPD policy attracted to Wales:

'I am probably more self-sufficient in my bones than any of these 'diawled bach' (little devils) that come here' (Farmer 1, personal communication, October 10, 2022).

'They come with money in their hands, they want to live in the countryside, the easy option.' (Farmer 2, personal communication, October 10, 2022).

This was a relatively common perception, that the OPD policy was drawing in a certain demographic that had no intention of following the criteria long-term and were using the policy as an excuse to get a small holding on the cheap, following on from the assertion that many were of a certain 'type' that had been seen before. There is also a suggestion here of wider issues permeating how these opinions are formed and how those influence attitudes and interactions with the policy. The

mention of money is quite indicative of concerns that it is urban dwellers and people from outside Wales that are pursuing OPD.

As well as this perception, lack of experience was also raised in a more practical sense:

'...you can be anybody, with no experience and you get five years...what makes it worse, is that I know a lot about growing veg, I have an interest in it, I know and understand the problems, they ignore all the problems' (G. Thomas, personal communication, January 20, 2022).

'There were lots of small holdings on this farm, these people were truly living from the land, and knew exactly what they were doing. These don't (referring to OPDs) there is a safety net for them now.' (Farmer 3, personal communication, October 2, 2022).

'There are a lot of things are thrown in for good measure [in management plans]- like foraging, picking raspberries and blackberries from hedgerows' (Farmer 2, personal communication, October 10, 2022).

'They never talk about handling pests, or if the weather goes against them' (Councillor 3, personal communication, May 5, 2022).

Again, there is element of those involved with agriculture, defending their position and their way of life, seeing remarks made in management plans as unrealistic and flippant in comparison to their daily lives, with one councillor & farmer suggesting that 'Maybe OPDs should come here and see what we do' (G. Thomas, personal communication, January 20, 2022), which rather demonstrates the vast gap between what famers see as possible and OPD's reality in the countryside. It also demonstrates the perception that applicants paint an overly positive picture in their applications, which could suggest trepidation on the part of the applicants about how their application will be treated if it did highlight the possibility of problems, but also may reflect the rigidity of the OPD policy which does not allow for much leeway, at least on paper. Simon Fairlie (S. Fairlie, personal communication, November 29, 2021), also raised questions about how productive OPDs are, suggesting that at least some would be happier in a live/work situation, situated on the edge of a village with access to some land and not seeing a huge justification for building a nice house in open countryside, citing Lammas as a precursor to OPD, being more focused on housebuilding rather than producing food.

To return to the general confusion and misunderstandings that abound in interactions with OPD, Jane Davidson outlined her vision for the policy and those seeking to do it: 'Those doing OPD are the pioneers, it is an apprenticeship in sustainable living' (J. Davidson, personal communication, March 3, 2022). In many respects, OPD does seem to be judged almost too harshly, with the expectation that participants have lots of experience before applying. As 'pioneers' in building low impact homes and living sustainably, there is a significantly experimental edge to the policy. This problem was recognised by those that supported OPD, that there are lot of skills needed and that it is unreasonable to expect for people to have all the skills necessary (D. Thorpe, personal communication, March 1, 2022), with Councillor Cundy remarking: 'It's difficult for OPD, because until they actually start, it's bit like someone coming out of school and going for a job and they get told, we only want people that have got experience but that does seem to be the case when applications are debated, there is a tendency to look for depth of experience' (D. Cundy, personal communication, February 4, 2022).

3.5. Planning Permission

Accessibility was a key issue highlighted by prospective OPD applicants and practitioners when questioned about the ways the policy could be improved and expanded. Applicants felt that the process of applying and writing the management plan was difficult and overly time consuming, so much so that many people wishing to live more sustainably were choosing not to apply, with even those more suited and better skilled for that lifestyle being put off. Some were choosing to live 'under the radar' for several years before applying retrospectively for permission due to perceptions that it was difficult: 'I could never write that application, too complicated, but I have the skills to make a living off the land' (Offgrid Interviewee, personal communication, June 1, 2022), exacerbating an issue that the forerunner to

the policy aimed to tackle. In fact, CCC highlighted that the existence of the OPD policy '...has resulted in an influx of people purchasing land with the intention of leading an OPD style lifestyle but without applying for planning permission' (Carmarthenshire Planning Department, personal communication, March 30, 2022), with the number of enquiries with regards to off-grid living significantly increased.

Issues with the policy are not only confined to councillors and farmers it seems, planning departments also voice concerns and have had problems with appraising applications. Planning authorities stressed the sheer complexity of applications and the inability to analyse the data provided properly (Carmarthenshire Planning Department, personal communication, March 30, 2022) with one planner explaining that 'there is a fear, when OPD comes across your desk as it is a very challenging application' (H. Luqoq, personal communication, August 11, 2022). As there is a range of land-based businesses available to potential OPDs as mentioned in chapter five, local authorities struggle as they need a wide range of specialist knowledge to critically appraise the information and ensure that it is robust and meeting the objectives of the policy (Carmarthenshire Planning Department, personal communication, March 30, 2022). The level of knowledge needed means that departments have to go through an extensive learning process in order to understand the detail and extensive presentations to explain applications to councillors (Carmarthenshire Planning Department, personal communication, March 30, 2022; H. Luqoq, personal communication, August 11, 2022; B. Knight, personal communication, February 16, 2022). This requires substantial resources that planning authorities do not currently possess, and they strongly felt that the cost involved was totally disproportionate to the fee of applying (Carmarthenshire Planning Department, personal communication, March 30, 2022). These issues surrounding a lack of sufficient funding was identified by all Planning Authorities that contributed.

Due to these problems, CCC Planning department have resorted to outsourcing the assessment of applications to Terra Perma Geo. CCC Planning highlighted how demanding the process is, given the lengthy reports generated by the consultants, needing a level of engagement they would struggle to achieve (Carmarthenshire

Planning Department, personal communication, March 30, 2022). Similarly, Brecon Beacons National Park Planning, who have only had two applications to date, had to send the first to Pembrokeshire Coast National Park Planners, which had previously processed OPD applications, such was the novelty of the process (H. Luqoq, personal communication, August 11, 2022). It is important to note that the use of consultants has also caused issues during recent planning committee meetings. Some councillors argued about the reliability and independent nature of their reports, with one stating that it was like 'giving the key for the hen shed to the fox' as the authors were too closely entangled with OPD with one being a member of the OPC and the other acting as a consultant to prospective OPD plans (Webcast, Oct 14, 2021). Despite being defended by the CCC legal representative present as having the expertise to conduct an independent report and the planning chair stressing that the company was staking its reputation by backing the proposals, it is quite clear that there is a feeling of mistrust amongst some councillors not only in terms of the applications and OPD practitioners themselves but also the appraisal process. This view was strongly put forward during interviews, for example, Gareth Thomas underlined the '...need for an independent person to appraise these applications, it costs a lot to get a consultancy firm in, they are not independent, they are biased towards OPD. It's easy for the planning officer to say we have got somebody independent in' (G. Thomas, personal communication, January 20, 2022).

Further to this, the admission from planning departments that they do not really have the staff and resources and are struggling to process them, demonstrates that although the policy has been in place for ten years, there has not been an effective channel for feedback to the Welsh Government. Even amongst councillors that are broadly supportive of OPD, they emphasised that the WG needed to review the policy and understand the issues it causes for local authorities (D. Cundy, personal communication, February 2, 2022), because of the potential this has to generate ill feeling towards the WG given the perception that the policy was put in place without thinking about how local authorities would need to accommodate it and the response it would elicit (Councillor 3, personal communication, May 5, 2022). It is quite telling that One Planet Council, as volunteers, offer training to local authorities due to the lack of expertise and understanding of the policy, which some authorities have made use of, suggesting that more support is needed. However, a degree of mistrust in local authorities was cited as potential barrier for using the OPC as a resource to help appraise applications (H. Luqoq, personal communication, August 11, 2022).

Some councillors interviewed, also cited the increasing availability of consultants that could write the applications for prospective applicants, which would undermine the difficulty of writing the application, diluting the quality of those applying: 'I am not sure, but they put the same bumf in each one and change the address' (Councillor 1, personal communication, May 5, 2022). The nature of some of the houses built are also questioned by some as being incompatible with the policy: 'some are huge, concrete slabs, insulation, things coming from abroad. It is meant to be built locally; things aren't being looked at close enough. If they don't work, in 5 years they are meant to knock that down.' (Councillor 2, personal communication, May 5, 2022).

3.6. Annual Monitoring

Unlike conventional planning approval, where the relationship between developer and planner effectively ends after the project is completed, OPD requires an ongoing association with planning authorities. Annual monitoring is a key facet of OPD living and yearly reports must be submitted as part of the planning condition to show compliance with the management plan. Of the OPDs interviewed and visited, all reported that they comply with this stipulation. A key part of living using only your fair share was to actively quantify your impact, as the OPD policy intends. Given issues such as a lack of resources and expertise with processing the applications, these problems inevitably affect the planning department's ability to evaluate yearly monitoring reports, the following quotes demonstrating this:

'Planning Officers presently review submissions but with the lack of specific expertise it is difficult to critically analyse. There is a degree of having to accept the information on face value as it is not possible to corroborate that all statements are true, especially in relation to vehicle trips etc.' (Carmarthenshire Planning Department, personal communication, March 30, 2022).

'...we need lots of resources to do this monitoring and to go through the applications. Policing it is difficult. How are we supposed to do that with a lack of resources. With annual monitoring, with a lack of staff, our primary focus is to deal with applications, they are not on the bottom of the list but quite low, to be honest' (C. Jones, personal communication, January 25, 2022).

Although planning authorities have been able to bring OPD into the fold, so to speak, by having mechanisms to monitor, clearly, they struggle to accommodate the ongoing nature of OPD, and the extent to which they can truly appraise these reports due to limitations on resources and possessing the appropriate knowledge to understand what is put in front of them, is questionable at best.

One councillor offered an example: 'If they said they were going to keep bees, I wouldn't have a clue, I guess it would be possible to find out how much could be produced but that is dependent on the weather I'm sure, but it would take so much time to research all these things, I am not sure how you could really know what was going on' (Councillor 3, personal communication, May 5, 2022).

Planning guidelines and legislation, as indicated earlier, are rather black and white, therefore accommodating OPD both practically and philosophically, if you will, is very difficult. Taking something at 'face value' and considering people's actions and behaviour is outside of planners' normal remit, as explained here:

'It is dealing with things that the planning system usually doesn't get involved with, like the way people live their lives, that is not something, that we as planners are used to or even comfortable with' (H. Luqoq, personal communication, August 11, 2022).

That is not to say that it is the same experience for all OPDs, for example, Golwg y Gwenyn (Bee View farm), has been audited with far more scrutiny, as discussed in Chapter Five. However, that is most likely due to its high-profile status as a result of media attention such as online news stories and a Ben Fogle documentary, the ongoing battle with objectors and its physical location. These stories have been picked up the media and sensationalised, such as a story running on Wales Online portraying the outcome of Golwg y Gwenyn's fifth year monitoring report as being a judgement on the success of the OPD policy in totality, and depicting the policy as being at a 'crossroads' (Shipton, 2022).

Given that the general ability to monitor accurately is severely limited, this has considerable consequences for the health of the policy, as in effect, authorities cannot adequately argue that OPDs are following the guidelines when questioned further, validating the concerns of councillors, farmers and even residents that are dubious of the merits of the policy and doing little to placate their ill-feeling towards it (Shipton, 2022). This feeling that OPDs can operate however they wish is encapsulated by the following comments:

'You have some that have multiple cars, going everywhere, nobody monitors them' (Councillor 2, personal communication, May 5, 2022).

'The policy is weak, it is too open, you can go anywhere and saying anything. It is not enforced or enforceable, because it is so wide, there are no lines that you can say: you've crossed the line' (H. George, personal communication, March 3, 2022).

'They are saying they live off four grand, having a cost of living that low is not achievable, even for basic costs, it is not realistic' (Councillor 3, personal communication, May 5, 2022).

In turn, applications are viewed with increased mistrust and scepticism, as councillors inclined to disagree with the policy are unable to give the benefit of the doubt on applications they feel will not succeed, knowing that the monitoring that takes place to ensure compliance is not effective, and therefore applications are debated based on the difficulties local authorities face rather than on whether the applications meet the criteria. This has led to some confusion amongst councillors feeling that ODPs themselves do not send the yearly reports as they should, even though the planning authorities interviewed suggested that most were cooperating, with only one councillor having the experience of reports not being sent in:

'I have one OPD that hasn't handed in a report for 4 years, and because of the lack of planners with knowledge of it, that's all they say is, I will do it next month and then they say, I may as well do one next April now for the year' (Councillor 3, personal communication, May 5, 2022).

This suggests it is quite a rare occurrence but further compounds general suspicion of the intentions and commitment OPD practitioners have to sustainable living, as is clear from one councillor's comment regarding it: 'I have asked, and they say there isn't any monitoring. If the planning officers had them, they would give them out to us, that's the stumbling block, the monitoring' (Councillor 2, personal communication, May 5, 2022).

It also means that when applications and yearly monitoring are dealt with in-house, there is scope to argue that there would be a possibility that the figures would not be scrutinised as much as would be expected, if you have a planner sympathetic to the proposals of OPD but equally if there was bias against it, such that numbers could be harshly viewed or audited to an unfair level. Judgement on these cases is incredibly problematic. Even when appraisal of annual reports is outsourced to an independent consultant, there is a possibility of unfairness depending on from what angle the reports are considered.

Despite the issues with monitoring, most participants felt that the application and the monitoring of it needed to be robust whilst also giving recourse to authorities if needed, and that rather than being onerous, the monitoring should be seen as the same as record keeping for a business (D. Thorpe, personal communication, March 1, 2022; B. Knight, personal communication, February 16, 2022). The fact that the Ecological Footprint Calculator meant that it could be measured was also cited by some as a strength of the policy by those supportive of it, as this gave a degree of authenticity to those living and experiencing OPD (B. Knight, personal communication, February 16, 2022; J. Davidson, personal communication, March 3, 2022). Although they also accepted that for local authority monitoring would be very tricky, and difficult to verify information without micromanaging, citing that the OPDs were trail blazers and pioneering, which meant that not everything would work (B. Knight, personal communication, February 16, 2022; J. Davidson, personal communication, March 3, 2022). This reiterates that the policy is quite groundbreaking and that something like this has not been done in a formal way (B. Knight, personal communication, February 16, 2022). Some participants also acknowledged that given the difficulty of monitoring for planning authorities, and those completing them each year, that there should be some scope for them to be tapered off after possibly ten years or so, or maybe not scrutinised to such a degree, while recognising that without having the monitoring in situ, the policy would not have been put in place (B. Knight, personal communication, February 16, 2022; T. Wimbush, personal communication, January 27, 2022; J. Davidson, personal communication, March 3, 2022).

Other issues with monitoring were also raised, such as the experience of an OPD in Pembrokeshire that had an enforcement order against them as they had not been submitting their annual monitoring reports, which in fact turned out not to be the case as the authorities had misplaced them (T. Wimbush, personal communication, January 27, 2022). As many planning authorities struggle to monitor for the reasons outlined above, OPD practitioners' assertions that they 'don't hear back' after sending in their annual reports is somewhat expected. Further to the knock-on effect this has for convincing those who question the policy, OPDs themselves are not able to show that they are meeting their targets and therefore validate their continued existence.

3.7. Criticism of WG

To a certain extent much of the criticism related to OPD is levelled against the WG. As stated earlier, in 2020 councillors in Carmarthenshire opposed to the policy passed a motion, led by Plaid and Independent councillors for the WG to review the policy considering the issues faced by local authorities (Youle, 2020). Interviewed councillors in Pembrokeshire that opposed the policy also backed a thorough assessment of the policy. This opinion was not limited to those opposed, even those who supported the policy could see the tension it caused and the need to remedy some of the issues that had become increasingly obvious since the policy was put in place. Those in favour also advocated for the need to review OPD to learn from the experience of it, look for other ways to promote sustainable living and to make the policy more open.

The call for a review was instigated by the perception that the WG are unaware of how OPD is functioning on a local level, encapsulated by the comments below:

'They need to look at it again and set clear guidelines. What they want out of it. And the resource to monitor it' (Gareth Thomas, Interview, 2022).

'The Senedd, no chance, they wouldn't know about it [OPD]' (Farmer 2, personal communication, October 10, 2022).

'You need to strengthen the policy in terms of what you can do, and then give power to the local authorities because they say we haven't got the experience. If permission is denied, people appeal, it goes to Cardiff, it is not Pembrokeshire's policy, it is the WG's policy. WG want to see it succeed, so if it goes to appeal, it passes' (H. George, personal communication, March 3, 2022). Despite calls for a review of the policy by the WG, it has not been looked at the time of writing. Julie James (WG Climate Minister) was approached for an interview as part of this thesis, and although she was supportive of the aims of policy, she reiterated its complex nature and how OPDs function, forwarding my questions to the planning department of the Welsh government (Welsh Government Planning Department, personal communication March 18, 2022). It was also recommended that I contact local planning authorities to understand the challenges of the policy area and even the OPC itself, as source of an informed view on the experience of OPD. This of course could be down to time constraints and many other policy areas being part of her remit, however it does suggest to a degree a lack of engagement and awareness of the issues surrounding sustainable living through the OPD policy, especially given its experimental nature and the knowledge produced by it, that could provide for other areas of policy. The need to review OPD comprehensively was seen as an important task for David Thorpe, who suggested that: 'It would make a very powerful argument, what works on different soils etc, a very powerful resource' (D. Thorpe, personal communication, March 1, 2022).

In September 2022, the OPC launched their own comprehensive review at the Senedd, although more quantitative in terms of outcomes, rather than the science of what has worked where, although the starting point has been provided for following up. Surprisingly, neither the Minister for Climate Change, Julie James, nor Deputy Minister, Lee Waters, attended. Although an OPC representative diplomatically attributed this to the timing of the review and the passing of Queen Elizabeth earlier that month, it is quite revealing that key ministers were absent at the launch, especially given that the OPC, is a group of volunteers which have compiled the masses of data needed to produce such a thorough review. This however corroborates with the Welsh Government Planning Department's stance on the policy that was communicated via email, that though they continue to support it and are aware of the issues raised regarding it, 'they have no plans to review OPD at the present time' (Welsh Government Planning Department, personal communication March 18, 2022). As such, their focus is to ensure a 'sufficient supply of affordable and market housing', as OPD is not intended to be 'a model of sustainable living for mass housing' or to 'contribute to a communities' general affordable housing needs' (Welsh Government Planning Department, personal communication March 18, 2022). They also highlighted that although OPD does make a small but important contribution to carbon reduction and climate change and can help contribute to a rural area's local economy and community', the numbers of OPDs are likely to remain relatively small in relation to other forms of housing. (Welsh Government Planning Department, personal communication March 18, 2022).

This underlines that OPD is seen as quite a niche policy, 'innovative' but not something that they could use to draw lessons from in more efficient land use, to inform new policies and apply to other strategies looking at ways of living sustainably. Should a government review take place, the WG planning department were keen to look in detail at established OPDs and understanding 'how they operate within planning guidance' (Welsh Government Planning Department, personal communication March 18, 2022), which is a starkly different to the vision Jane Davidson has for OPD and the data it has generated in terms of using the land differently. It also seems to run counter to Wales' aspiration to be a one planet nation within a generation.

In response to the issues surrounding resources for local planning authorities, the WG planning department made clear that it is unlikely with the current financial situation that resources could be made available for dedicated OPD developments, especially given they make up a very small proportion of applications: '...the Welsh Government has to decide how to deploy its resources, and planning covers a huge range of policy issues. OPD is important, but in the scheme of things there are wider housing, energy, economic and environmental matters that we also have to focus on' (Welsh Government Planning Department, personal communication March 18, 2022). OPD it seems, is here to stay, but it is unlikely to evolve either.

In addition to the feeling that the WG were unaware of the scale of the issues for local authorities, there was a perception that there had been a lack of foresight when creating the policy about how it would be received and eventually play out. Speaking to the Chair of the CCC Planning Committee, Alun Lenny offered a fair assessment of why the policy had ran into trouble on some occasions, referencing the application that had been denied in October 2021: 'The policy had good intentions, it is a great idea, no doubt, but they (WG) haven't thought it through, they should think further ahead, how the policy will work when they put responsibility on the local councils, there is no mechanism to monitor, if there was strict, robust annual monitoring, I think we would have passed the last OPD we looked at, if we know that it is going to be watched' (A. Lenny, personal communication, November 9, 2021).

In general there is a sense that despite its well-meaning goals, OPD still represents the 'alternative', and is perceived that way rather than feeling mainstream, while the policy itself is seen as 'cobbled together' and ultimately not implemented in a straightforward way (D. Cundy, personal communication, February 4, 2022). Local issues had continued to fester and caused resentment: 'It is not just about putting a bungalow for a retiring farmer in the corner of a field, it is more than that, it is for when two generations are working side by side, a young family. Especially that farms are bigger now' (A. Lenny, personal communication, November 9, 2021). Again, we see reference to the context that OPD is situated in, this general feeling that there is unfairness which undoubtable informs opinions that negatively view the policy.

3.8. Welsh Language & Culture

Another aspect of OPD which was raised, with particular relevance to a previous section discussing the more traditional complexion of the countryside, was the perceived impact that OPD may have on the Welsh language and culture. Weaved into this are further longstanding concerns surrounding second home ownership and holiday homes damaging communities (Williams, 2022), and also people selling up their homes in wealthier parts of England, and taking advantage of a cheaper house market in Wales, or to simply purchase homes with more space, this was particularly noted trend across the UK during the covid pandemic (Jones, 2021). These views are encapsulated by the following comments:

'You need to have money behind you, to build a house, no mortgage, so it tends to be people from richer areas, so they can sell their house or asset, and it's nice houses they have in the plans, it's not a 20,000 pound house with a zinc roof, they are 100,000 pound houses or more. The young people around here, not many of them have a 100 grand in their pocket by the time they are 30. That's why nobody is in this position' (Farmer 2, personal communication, October 10, 2022).

'It's not the children of Carmarthenshire that are doing it' (Farmer 3, personal communication, October 2, 2022).

These issues conjure narratives of pseudo-colonialism, which are further entwined with cultural decay and concerns over the Welsh language. Approaching it from his point of view as a consultant for prospective OPDs, Tao suggested that rather than an overt worry about the Welsh language or culture, that anti-OPD feeling might be linked to an overall situation of being powerless to changes in rural areas, such as second homes or people retiring to the area, or even wider issues such as concerns over agricultural markets or agricultural subsidies, while OPD represents something 'they can exercise control over' (T. Wimbush, personal communication, January 27, 2022).

On a conceptual level and returning to the productivist and post-productivist narrative discussed in the literature review, this research has reinforced the notion, touched upon by Cloke and Goodwin (1992), that there is a possibility for tension in rural areas given that it has increasingly seen new inhabitants harbouring different images and ideas about the countryside. This is especially the case in comparison to those that have lived there longer (Cloke & Goodwin, 1992, p. 331). Murdoch et al. (2003) also placed this dynamic within on-going economic and demographic changes, with agriculture becoming less important in terms of its economic output and rural areas perhaps being envisaged as a more environmental space along with the enduring idealised version. This tension and conflict – now widely recognised across the rural literature - is also quite obvious in the debates surrounding OPD, with the residents themselves caught up in these competing viewpoints. This clearly came through in this research. OPD residents can also be seen as their own distinct category within the new rural inhabitants mentioned above, with their own visions of the future projected onto the rural landscape, underlining the multifaceted and complicated nature of a post-productivist rural posited by Marsden et al. (1993). Farmers voiced concerns which seemed to be rooted in an enduring productivist mindset, with views only tempered by a nostalgia for the smallholdings that used to exist on their land (illustrative of the 'restrained' productivist vision noted by Halfacree 2006a). Issues with other green initiatives such as installing solar panels on farms and rewilding were also stirred into this mix.

This research also aimed to redress the imbalance highlighted by Halfacree (2006b) in his evaluation of the BTTL movement, that more attention should be paid to the radical components that compete in a contested post-productivist rural, in order to analyse the 'new countrysides' emerging (Halfacree, 2006b, p. 310). It has done this by engaging with the experience and perceptions of those living one planet lives and stakeholders, exploring the 'real lives' involved and in turn interrogating the reality of the OPD policy, and its 'trial by space' (Halfacree, 2007, 138).

Though there have been recent studies of these 'radical' and 'alternative' lives - for example Jones (2015) and Forde's (2020) anthropological work, which have analysed what it is like to live sustainably - these have been focused on the ecovillage and off-grid community level rather than the individual household units characteristic of OPDs. While some literature has emerged from those engaged with OPD directly, which have started to unpick the issues and experiences (Delaney, 2020; Wimbush, 2021) of pursuing one planet lives, the area remians generally under-researched especially with regards to what I earlier termed as the 'second wave' of OPDs, which were fully created as a result of the policy, rather than existing projects applying for permission retrospectively. By generating original data by interview and participant observation, and exploring the experiences and perceptions of OPD, the research has thus contributed significantly to the emerging literature, expanding on the themes and issues outlined by Harris (2019), the most complete overview and analysis of the policy so far.

While Harris (2019) has begun to look at the experience of OPD participants, this thesis expanded on this using several case studies to get a much deeper understanding of what OPD looks like, the motivations of those doing it, their daily lives, as well as their experiences and feelings. As stated in the methodology, from the beginning I viewed the overarching goals of the OPD policy as both positive and admirable given the desire for more sustainable ways of living but wanted to gain a more comprehensive overview of how this was playing out in reality, not least to ultimately help OPD progress. On reflection, my views on many aspects of the farming community I engaged with were initially less sympathetic but, as the field research progressed, I developed a more nuanced understanding of their lives and experiences and how this informed what was often a critical judgement of OPD. As a result, the debate surrounding OPD and those external to it, and what underpinned these opinions, became central to the thesis. Building upon previous literature, this research has acknowledged some of the wider issues facing the current complexion of rural areas and the impact this has on the OPD policy. Topics raised include the immense pressure felt by those involved in agriculture, such as the need to acquire more land and intensify their output amongst a backdrop of impending changes and improvements to its environmental credentials, and how this informs debates and shapes the opinions of those involved in decision making. By incorporating these

wider themes and trends, the research has sought to bring together and bridge the gap between the multiple strands feeding into these debates and situate OPD experience into this wider narrative. In short, it speaks to the broader question raised by Halfacree (2006b, p. 312) (2006) of 'what...we want the countryside to be like'.

Fieldwork demonstrated that those pursuing OPD were deeply committed to a sustainable, low-impact lifestyle, evidenced by their day-to-day actions. Participants were motivated by political reasons and concerns for the environment but were also driven by a longing of being immersed in nature. They were found to be living vastly different lives in the sense that decisions were guided by the impact this would have on their ecological footprint, with participants modifying their behaviour in line with their capability to create renewable energy. All were producing food for themselves well above the 30% threshold required for OPD, with many greatly exceeding this, with their land-based businesses ensuring that they met the overall 65% figure and covering their minimum income needs. There are some differences between OPDs in terms of the scale of their businesses with some running arguably smaller enterprises to meet the criteria, meaning the division of labour is different, for example, one person working on the OPD full time, will the other has a job outside of it. However, even in these instances, those working elsewhere or envisaged themselves splitting their time between their OPD and another job, were found to be working in areas related to sustainability or climate change, underlining their overall commitment to the cause.

The experience of the application phase of OPD was shown to be a relatively traumatic experience for most, though some had had a relatively good experience, they were acutely aware of the trouble some prospective applicants had suffered. The application for most is incredibly daunting and serves to put off many with the motivation to live more sustainably. The pressure of starting a business, building a home, potentially looking after a family, improving the land, living a low-impact life, as well as ensuring targets are met, especially at the five-year mark, meant that most felt pressure, or even burnout to satisfy the demands of the criteria, suggesting that a degree of compromise and understanding should permeate the relationship between OPD and the planning departments. Though those participating in OPD recognised the benefits of living this way and were happy in their lifestyle, notwithstanding the ongoing feeling of being watched, annual monitoring or getting over a degree of burnout with relation to the application phase, living according to the principles of OPD is not easy and quite demanding.

For some OPD practitioners, there was a feeling that the policy was overly intrusive in terms of evaluating their personal lives with the ongoing need to complete annual monitoring reports. This topic was picked up by Harris (2019), who explored how established planning rationalities accommodated exceptions to the normal rules to allow for the scrutiny of people's consumption and behaviour, which are not usually under the auspices of a Planning Officer, concluding that planning authorities have been able to bring OPD into the fold, so to speak, by having mechanisms to monitor. However, clearly, as shown in this research, the planning system does struggle to accommodate the ongoing nature of OPD, and the extent to which it can truly appraise these reports due to limitations on resources and possessing the appropriate knowledge to understand what is put in front of them, is questionable at best. This is evidenced by the time taken for applications to be deliberated, and that of the OPDs interviewed, with very few hearing back regarding monitoring reports. Though some planning authorities seem to have got to grips with OPD, Carmarthenshire Planning Department, have been shown to outsource, underlining their inability to evaluate applications due to a variety of reasons including lack of resources and specialist knowledge, which suggests that in reality, while mechanisms are in place, the extent to which they are interpreted and understood is quite limited depending on location. Even if decisions are made on applications by the planning authorities themselves such as in Pembrokeshire, monitoring reports are low priority for them, given their workload on appraising planning applications in general. As a result, OPD participant's experience with the planning authorities was very inconsistent and most found the experience quite draining and stressful, while others, though finding the process difficult in terms of getting the application and management plan written, had found the overall experience to be reasonable. Rather poignantly, the mismatch between the ethos of OPD and the more rigid planning system was encapsulated by Helen Luqoq, a planner working within Brecon Beacons National Park (which is generally supportive of these sorts of initiatives), who stated '..at the moment we

have 21st century challenges, with a 20th century planning system, those two things don't work together' (H. Luqoq, personal communication, August 11, 2022).

Turning to the views of elected councillors on planning committees and other stakeholders, Harris (2019) concluded that the countryside's traditional conception established by The Town and Country Planning Act, more than seventy years ago was found to still guide and inform the opinions of those external to OPD such as councillors and local communities. To certain degree this was also borne out by the research undertaken, as many participants misunderstood or could not comprehend the exceptional nature of OPD being outside of the LDP. However, it has been established that there are several other concerns and issues underpinning these opinions on OPD, certainly there is a political dimension to the critique of OPD, as many councillors pinpointed their grievances against it in juxtaposition to the position of farmers and agricultural workers in the countryside, and a perceived unfairness that OPD could get planning easily, whereas farmers and their children could not. Wales' association with otherness was also brought to bear (Halfacree, 2011). To further undermine the argument for OPD, many councillors also evoked the imagery of past 'alternative' experiments and lifestyles in their perceptions of those pursuing OPD, something that many would have had first-hand experience of, equating those pursuing OPD as a new wave of hippies making use of a loose and badly implemented policy, or romanticising the lifestyle. This opinion was not just the preserve of elected councillors or farmers, indeed Simon Fairlie also posited that OPD was a potential avenue for 'self-sufficient hippies', perhaps a little surprising given his advocacy of low-impact living, although this view may have indeed been founded on the more 'mainstream' aspects of the OPD policy in comparison to more 'alternative' ethos of LID as originally envisaged, as well as a conviction that to make sustainable living more accessible, OPD would need to evolve.

Moreover, this thesis also incorporated the views of farmers themselves, to better understand the environment OPD is situated in at this moment in time, with the debate surrounding OPD also speaking to the wider question of the purpose and future of the countryside. Farmers and those with agricultural backgrounds were shown to be deeply defensive of their way of life, even though most articulated that their lifestyle and farming techniques had been forced to change by market forces. Many as a result, conflated OPD with other green initiatives, such as solar panels

being erected on farms and rewilding. Coming from an agricultural angle, many felt that OPD was just not possible with such little land, though they pointed to the success of smallholders in the past, many felt that those pursuing OPD were not skilled or experienced enough, even though the policy was envisaged as an apprenticeship in sustainable living (J. Davidson, personal communication, March 3, 2022). It is clear that farmers are under immense pressure and OPD is then seen as another entity attacking their way of life and practices. This issue was discussed with Jane Davidson, who suggested that maybe OPD needed to be re-branded as 'horticultural plus' in such a way for it not to be challenging to farmers and used in the future to address the horticultural needs of Wales, by sitting alongside what farmers do (J. Davidson, personal communication, March 3, 2022). Several years ago now, Halfacree (2007) suggested that rural 'space' was in a period of crisis and how this can offer an opportunity for alternative visions to be realised. This research has served to reiterate this point today when rural crisis seemingly continues (e.g. Halfacree 2023). It is clear that OPDs are succeeding in their endeavours against a backdrop of uncertainty and fragility. However, while this could thus be a moment for OPD to widen and deepen its scope, issues posited earlier echo Scott et al's (2011) conclusion that despite an awareness of challenges in rural areas on a national level, 'power structures' and resistance on a local level has stymied progress (also Halfacree forthcoming).

Though rural areas could easily accommodate more OPDs, the policy is to a certain extent quite niche and given that the policy is already a decade old, the number of OPDs is still quite small, demonstrating the barriers to entry. If the principles of OPD are to be taken up more widely, in line with the wider goal outline in the One Planet : One Wales document , then changes would need to be made. This was something raised by Thorpe, for him, OPD was a thin end of a wedge, a lifestyle which would not be accessible to the vast majority, with two ways of mainstreaming it, either by creating OPD communities and requirements that are marginally easier to attain or by using an idea that he has developed, namely the One Planet Standard, to apply to all government actions, the practices of corporations and the behaviour of public bodies (D. Thorpe, personal communication, March 1, 2022).

All participants felt that this was a missed opportunity for Wales, and that the policy could be made more inclusive and re-branded to attract more people from within Wales, as well as those generally wanting to lead more sustainable lives. Sioned Haf of Llwyn Pur OPD was a good example of this, as she saw OPD as a way back to the community where she grew up, to contribute to the local community and help the Welsh language. OPD could certainly be a pathway for young people and families to re-settle in the countryside, reversing the closing of services likes schools and reinvigorating the local economy. These issues were also linked to affordability, with Sioned stating that there would have been no way for her to return home independently without doing OPD, as buying a house was out of reach.

Ultimately, OPD needs to be revisited by the Welsh Government, as participants themselves are demonstrating the ability to live sustainably, create an income and breathe life back into rural areas. As James of Swn yr Adar summarised: 'It is like steering a tanker, slowly, we need to perhaps park our attachments to what was and create a change, everyone has to participate in that I think' (J. Adamson, personal communication, March 4, 2022).

Recommendations- Making OPD fit for purpose.

- Although OPD has been reviewed by the OPC, the evidence of those living One Planet Lives needs to be revisited and a report prepared by the WG itself. This would enable a thorough first-hand understanding of the matters surrounding the policy, rather than relying anecdotal or media coverage of the problems. This could be viewed in conjunction with the OPC review and any academic writing on the subject to date.
- A review into OPD could reveal lessons that can be applied to other areas of policy, to enable a Wales which is truly sustainable.
- Other OPD models could be created as a result, enabling more affordable options for people to live sustainable lives, which could include edge of settlement developments that include zero carbon building techniques but allows for a conventional job alongside a smallholding model.
- More funding needs to be made available to local authorities to enable training or specialist knowledge to be available in not only assessing OPD applications, but also to effectively monitor OPDs, as this would ensure compliance and placate any concerns regarding annual monitoring reports.
- More flexibility and collaboration are needed in the relationship between prospective and active participants of OPDs, and planning authorities, this would be enabled if more resources were made available for local authorities.

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OPD participants - Interview Guide

Fully explain the aims of the research and its scope before starting.

- Tell me a bit about your background? How did you arrive at OPD? What was your journey?
- Talk me through the application process (Why was this aspect easy/difficult?)
- What is your land-based business?
- Tell me more about your home (or planned home) and the land.
- What is it like to live a One Planet life? How do you feel living an OPD life? (Cover Annual monitoring as a key stipulation of policy) Ask about targets. How do you feel about these
- What is your average day like? (Tasks, job division?)
- What motivates you to live this way?
- Do you have a relationship with the wider community or other OPDs? Yes-In what way? No- Why?
- How do you feel you are viewed by others? (Local Community/ Local councillors/Planners) Has it helped/hindered, was it / is it a problem?
- How do you think OPD perceived?
- What do you think of the OPD policy? Does OPD work? What could be improved or changed?
- What is the future of OPD? Barriers and opportunities (Welsh Government, Local Councillors, Planning Departments).
- Any further comments.

Interview Guide- Councillors

- Tell me a bit about your background.
- How does your role relate to OPD?
- How do you feel about the OPD policy? (In general, application phase, monitoring)
- Is the policy working? (Implication for rural areas and others living there)
- What are the main issues surrounding OPD?
- Is the policy misunderstood?
- Why has the policy caused tension in some areas?
- How is OPD viewed generally from your perspective, has this changed over time?
- Should or how can the policy be developed further? (Welsh Government)
- Any further comments.

Interview Guide- Planners

- How many OPDs have come before your Planning department?
- What are the main opportunities/challenges OPD presents from a planning perspective?
- What is your impression/perception of any OPDs that have been in your area or any other area for that matter (if you can comment)?
- What has been the local reaction to OPDs from your perspective?
- Every OPD must send an Annual Monitoring Report to the planning office, is this the case in practice?
- How are the annual reports assessed and does a site visit take place to verify the report?

- Councillors have gone against professional advice on some OPDs, why do you think that is the case?
- How could it be improved as a policy from a planning perspective?
- To what extent do OPD sites meet the requirements of the policy and the ecological footprint requirement?
- Has there been any enforcement action taken against OPDs?
- Would it be helpful to have a dedicated OPD officer on national basis to assess OPDs?
- Any further comments.