

Sustainable Land Management Consultation 2014

I am a pioneer. I live on a 6 acre smallholding with my family and we live a modern lifestyle that includes all manner of mod-cons. We are also amongst the few people in the UK to live a one-planet footprint. We produce all our own electricity (solar and hydro) and fuel (timber biomass) as well as most of our own food directly from our holding. In addition we derive the majority of our income from land—based activity. We supply the neighbourhood with milk (delivered by dog-cart) and the locality with soft fruit, eggs and cut flowers, and sell our own organic skin care products online. Our holding is biodiverse and beautiful.

We are part of the Lammas ecovillage in Pembrokeshire, of which I am one of the founders. I am an advocate of the 'One Planet Development Policy' (TAN6), and give talks on the topic to colleges, universities and other interested groups. I also provide a range of practical, financial and strategic advice for individuals and groups creating land-based lifestyles and livelihoods.

In four years the Lammas project has transformed 76 acres of environmentally degraded sheep pasture and neglected woodland into a biodiverse, productive and abundant ecovillage that is on track to substantially meet the food, energy and income needs of its many inhabitants. Land which previously generated an income of $£2,500 - £3,500^{1}$ as part of a larger hill farm estate now produces in excess of £60,000 of produce, approximately half of which is consumed directly within the ecovillage, and half enters of the local economy². Once established the project expects to be generating in excess of £100,000 through land based produce and activity. Meanwhile the biodiversity increase that we have facilitated though our land management practices is remarkable.

The key to understanding our approach lies in questioning the core premise of the planning system. The basis of our planning system (The Town and Country Planning Act 1947) separates out human habitation from land management; it reserves the open countryside for agriculture (and forestry) and directs the remainder of the population to live within town and village boundaries. This strategy was created in the trauma following the second world war and is based on the core principle that a cheap and plentiful energy source (fossil fuel) will accelerate the mechanisation, specialisation and industrialisation of agriculture and will enable complex and intensive resource distribution networks to supply an urban population with its needs, this being an efficient and progressive approach to enabling modern lifestyles for a growing population.

The problem is that the cheap and plentiful supply of energy – fossil fuel - is not only dwindling, but also polluting the environment to the point of endangering the global ecosystem. The scientific

¹ Through the production and sale of lamb on 60 acres of pasture and 16 acres of woodland.

² These figures are estimated – the actual figures for 2013 are currently being calculated and will become available in April 2014. In 2012 £43,600 produce was generated from the land based activities. www.lammas.org.uk/ research

community is clear that in order to secure humanity's future, widespread and radical change is required.

Our approach is to redistribute people into the landscape and support multi-diverse land-based resource management to meet people's needs at a human scale. This approach does not require a massive transportation network to move fuel, food, energy, waste and water – rather these needs are all met at a local-level. It does require intelligent design, an understanding of ecosystem science, and time to build a sustainable infrastructure base. The potential for transforming people, communities and ecosystems is massive.

At a governmental level the incentive is a more resilient economy based largely on locally grown food. At a regional level the opportunity to explore different examples of what it is to live a one planet footprint will have a knock on effect. At a community level the prospect of fresh local produce, young families moving back to rural communities and increased local access to the landscape are clear benefits. At a grass roots level the incentive is an affordable, resilient homestead in a community setting with access to clean natural resources. It naturally reconnects people to landscape.

As a result of developing a direct relationship with the land-base people naturally evolve their awareness to balance their ecological impact on the resources they are engaged with. I have witnessed this transformation time and again first hand. People who previously lived a conventional urban lifestyle are able to transform their resource use by developing an intimate relationship with their land-base. I will illustrate this with a clear personal example;

For a time I lived in Swansea with my family we had a mains connected washing machine. We did not know (or really care) where the electricity and water came from. We had no awareness of where the waste went. We used the machine indiscriminately. Now that we live at Lammas we not only know where all the resources come from and go, but we have an intimate relationship with them. We understand and care for the leat that supplies the hydro-turbine with water, the spring that supplies the ecovillage with fresh drinking water, and the reedbed system that cleans the grey water. We still use our washing machine, though we use it with discretion, care and gratitude. There are periods (dry spells in the summer for example), when we are not able to run a washing machine and need to seek alternatives. Our lifestyle responds to the patterns of the seasons. In short our relationship with our landbase has enabled us to develop an appreciation of our lifestyle impacts, as well as a flexible approach to resource management.

Our approach draws on traditional knowledge and understanding as well as innovative green technologies and modern materials. At its heart is the concept of **permaculture** – a human scale approach to intelligent resource management that aims to maximise diversity of produce whilst developing a healthy ecological base. Academic Research³ into the topic has lead to the Welsh Government creating an exception planning policy to support such initiatives⁷.

The Potential for replication in Wales:

If we notionally divide land in Wales into three altitude zones, we have:

• The Productive lowland – including urban areas, the vast majority of horticulture and a considerable portion of dairy/ meat production: comprising approximately 40% of the land area and being between sea level and 150 meters above sea level.

³ See www.lammas.org.uk/research

⁴ Land area figures taken from http://www.aber.ac.uk/gwydd-cym/modiwlau/pynciaullosg/AgriInWales.pdf

- **The Mountains** 27% of land in Wales is above 300m⁴, and is largely mountain/ moor, with some coniferous forestry.
- The Hills 33% of land in Wales (approx 693,000 Ha)⁴ is between 150 and 300 meters above sea level. Considered as marginal agricultural land (low in productivity), this land is largely permanent pasture/ rough grazing with some forestry/ woodland (largely coniferous). As a result of decades of agri-business subsidies encouraging conventional intensive agricultural management this region is generally low in biodiversity with a degraded soil base.

It is this mid-zone (the hills) that offers the highest potential for transformation from rye grass and sheep monocultures (or spruce plantations) into a band of biodiverse forest gardens/ ecosmallholdings.

If half of this land (nominally that with a southerly aspect) was dedicated to low-impact smallholdings (of an average 3Ha size), then we could create approx 115,000 new eco-holdings, accommodating approx 414,000 people⁵.

16.5% of the land directly supporting 14% of the population living sustainably.⁶

All of this land contributing to ecological health. All of these people generating land-based produce and expertise for the local economies. All of these smallholdings being run on renewables and supporting one-planet lifestyles.

Land previously considered uneconomical by virtue of being too steep, too poor or too high would. through permaculture practices, be transformed to a mosaic of habitats and productive ecosystems supplying fresh produce, crafts and skills to local towns and villages. These regions would become reserves for wildlife and biodiversity and also play a key role in stabilising the climate by absorbing carbon dioxide from the atmosphere and locking it into biomass. A commitment to a low-impact lifestyle is one of the key performance indicators of the planning policy initiative and is assessed not only at application stage, but also as an ongoing measure.

Supporting Factors:

- Planning provision for such a transition is now in place. Whilst not without its challenges, a robust framework has been created to assist applicants and planners in producing high calibre management plans with ongoing monitoring mechanisms. At the time of writing there are 8 applications in across Wales⁸
- On-the-ground examples are being constructed⁹, the most notable of such being the Lammas ecovillage in Pembrokeshire.
- The movement requires no funding from central or local government. It is a self-funding and self-motivating grass roots movement, that is both affordable 10 and attractive.
- Climate change and the associated prospect of environmental/ social/ economic instability are continually pressing the case for radical social change. In particular the prospect of lifestyles that are buffered from fossil fuel dependence and economic instability, as well as offering fuel and food sovereignty become increasingly attractive in the context of increasing weather extremes.

⁵ Back of an envelope calculations based on 3.6 people per household (the Lammas average), and being is somewhat higher than the national average (2.3) due to the predominance of young families

⁶ Back of an envelope calculations based on Wales population being approx 2,900,000

One Planet Development, TAN6, July 2010

At both pre-application and application stages

⁹ See <u>www.lammas.org.uk/planning</u>

¹⁰ Set up costs between £50,000 and £100,000 per smallholding

Inhibiting Factors:

- The current agricultural subsidy system financially props up the current status quo, perpetuating the dominant position of agri-business in the landscape and the marketplace. Essentially the single farm payment acts as a food subsidy for mass-produced food, and small scale horticulture struggles to compete in the production of primary produce. As a result many One Planet Developments focus on value-added produce.
- The current industrial approach to food production masks the true cost of food production, including carbon pollution, biodiversity loss and soil depletion. One Planet Developments on the other hand account for these losses in the management of their holdings.
- The nations sense of identity (social and landscape) inhibits change, both at a local and national level.
- Despite massive consensus from the scientific community, the denial of the prospect of climate change and the resulting environmental/ social/ economic instability is still a strong social factor in Wales.

Challenging Conventional Assumptions

To consider sustainable land use without considering population lifestyle and impact is akin to treating the symptoms of a malady rather than the cause.

To assume that human beings have a negative impact on their environment is to reinforce the very assumption that is driving our society further into chaos.

To assume that farming conflicts with biodiversity is to ignore the potential of permaculture to provide food, fuel and resource needs.

There are solutions. They are available right now. They can be scaled up.

Invitation

I would be more than willing to show the consultation team around the Lammas ecovillage.