The ecovillage experience as an evidence base for national wellbeing strategies

Robert Hall*

Global Ecovillage Network, Västerhejde Toftavägen 211, SE-621 99 Visby, Sweden

Available online 18 August 2015

Abstract

Overarching policy objectives for national wellbeing are currently being developed by national governments, replacing the objective of economic growth. Maximising the quality of people's lives, their happiness or subjective wellbeing has, however, been the conscious strategy of ecovillages. With up to a half-century of empirical experimentation, ecovillages offer an evidence base that can be utilised to benefit the wider society. In order to facilitate the research needed for appropriate government policies to deliver a high level of national wellbeing, this paper attempts to shed light on some twenty different elements—the common attitudes and practices of ecovillages—which have allowed them to succeed in this endeavour. Further research on the wellbeing of ecovillages is suggested to enable the wider society to focus on the process of achieving a higher level of wellbeing for sustainable development.

1. Introduction

The widespread criticism of economic growth as an objective of economic and national development policy has finally led to the mainstream acceptance that the wellbeing of its inhabitants must logically be the ultimate goal of any democratic state. We now see an increasing interest in the adoption of policies that promote national wellbeing as a comprehensive objective. Grinde (2009) points out that the quality of life or happiness has traditionally been important in Japanese society. But it is Bhutan that led the way with the king's ground-breaking promotion of "gross national happiness". Other states, such as Malaysia and Norway, have followed suit in showing interest in similar policies (Beal & Rueda-Sabater, 2014). The UK chose to take a leading role in formalising policies around this new thinking when in 2006, Prime Minister David Cameron declared "it's time we focused not just on the GDP, but on the GWB – general wellbeing" (Wellbeing in four policy areas, 2014). Now an overarching national wellbeing strategy

---
* Tel.: +46 76 2187369.
  E-mail address: robert@gen-europe.org.

is emerging which will replace the earlier focus on economic growth. Focusing on wellbeing, which may seem to be obvious for an outsider, is in fact, revolutionary. To create a high level of wellbeing, a society needs to rethink many of the accepted sector policy objectives and budgeting practices. Fostering sustainable wellbeing requires a supportive environment to promote the collaborative use of resources across sectors, space and time. This requires an intricate balance between the individual and collective good. While a number of studies are now being done on the subject of policies and strategies for wellbeing, we are basically relying on theory, as no country has fully integrated the wellbeing of its inhabitants as an all-encompassing objective for its governance.

Having said this, there is a rich half-century of "policy implementation" experience where wellbeing has been used as the ultimate goal in smaller communities or ecovillages focused on this goal around the world, which is poorly understood and utilised. For example, it has been documented that the kibbutzim of Israel have better health, wellbeing, and life expectancy among their members compared to the outside population, at least when comparing their elderly (Grinde, 2009). Without expressly stating a wellbeing policy objective, ecovillages have tested and refined ways to use the available built, human, social and natural capital to achieve the greatest possible wellbeing with the given resources. To manage this implementation, they have developed techniques and procedures to retain a balanced and integrated approach to planning, budgeting and execution, so that all aspects are taken into account. It is this participatory and holistic governance, which remains a rare example, which could help national governments who are now trying to create such cross-sectoral, intergenerational strategies from scratch. Ecovillages are able to combine both economic and non-economic objectives in one wellbeing-focused governance process. Maximising the quality of people's lives, their happiness or subjective well-being, is the predominant aim of nearly every ecovillage. With up to a half-century of experience, ecovillages have evidence-based, cross-sectoral policies, and have tested effective budgetary solutions that can be of service to the wider society. As Grinde (2009) points out, these national-level applications are important, because it seems unlikely that the majority of the population will settle in ecovillages or similar places.

Before going further, the use of several terms used here should be defined. The World Health Organization has given us the definition that "quality of life" is "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns". It is a broad ranging concept that, in a complex way, is affected by a person's physical health, psychological state, personal beliefs, social relationships and their relationship to the salient features of their environment" (Oort, 2005)." A second follow-on term, "Subjective Wellbeing (SWB) was defined by Deiner (2009) as "the general evaluation of one's quality of life". The concept of subjective wellbeing has three components according to Deiner. He refers to personal assessments of one's life satisfaction, one's frequent experience of pleasant emotions and the rare experience of negative emotions (Deiner, 2009).

Quality of Life and Subjective Wellbeing both function as scales of measurement from low to high, yet it is, in fact, just the high quality of life and high level of wellbeing together which is the desired objective itself, so that understanding how to achieve higher levels in these measurements becomes the key issue. Thus, a third concept to define is "flow" or "flourishing". Flourishing is more than just a high level of wellbeing, and is not equal to it. Seligman (2011) has developed the PERMA theory of wellbeing where Positive emotion, Engagement, positive Relationships, Meaning and positive Accomplishment (PERMA) are characteristics of a state of flow or flourishing which represents a high level of wellbeing and is relatively easy to identify. Flourishing is that state in which "an individual thrives, stressing the importance of healthy relationships, pathways to achieving flow, the development of a connection to something larger than the self, and other qualities that make for an optimal life" (Pluta, 2012). Used as a measurement tool, it would be possible to quantify the degree of flourishing, providing better information on how to facilitate reaching this state. Hubbert and So (2009) used a model similar to Seligman's PERMA to measure the percentage of flourishing citizens in 23 European countries. Flow or flourishing is thus a desired state for an individual or community to achieve, requiring additional research to better illuminate how society can promote this high state of wellbeing. This paper will mainly use the term "wellbeing", which should be understood as both subjective and holistic, including all aspects that contribute to an individual's or the community's feeling of wellbeing (Huppert & So, 2009).

2. Materials and methods

To expose the potential for using the experience of ecovillages in wellbeing policy formulation, this paper will try to identify areas where ecovillages have invested time and effort in transforming contemporary structures and
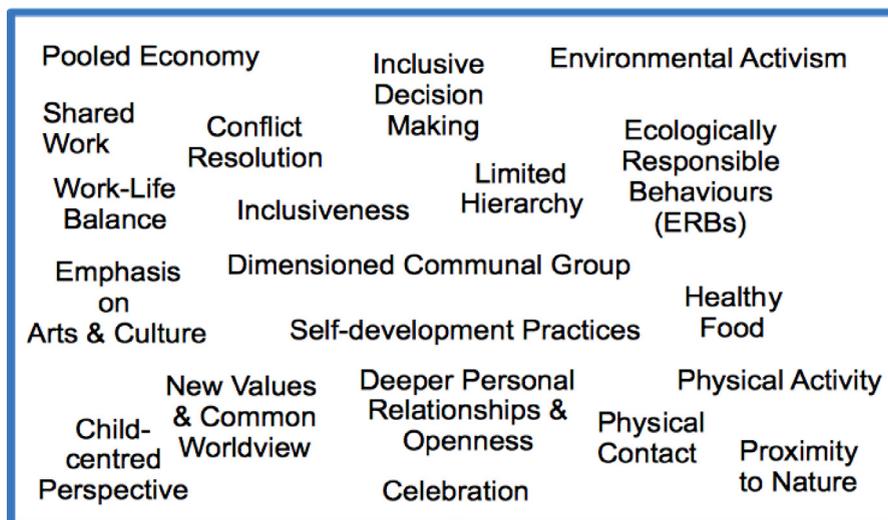
Diagram 1. Ecovillage elements contributing to wellbeing.

practices into alternatives in order to achieve wellbeing. Grinde (2009) suggests that in his evolutionary perspective, this transformation would "approximate those features of tribal social interactions that are likely to improve wellbeing". He believes that ecovillages are in fact, doing this, but "rarely" is this done out of an awareness that the slow pace of evolution does not allow wellbeing to be achieved when basic social conditions from our evolutionary history are denied. Grinde concludes that the rationale for ecovillages choosing solutions that are in fact in line with our human biology is intuitive or by trial and error. These solutions, developed through intuition or "trial-and-error", or perhaps more logically as a combination of the two, are now going to be identified for possible scaling-up for use in national wellbeing strategies.

A qualitative comparison of ecovillage approaches to common wellbeing elements follows below, which could be a potential input for policy formulation processes. Most of the data on ecovillages is based on the author's personal visits to these ecovillages or from conversations with their residents. This research is admittedly from an advocacy/participatory approach. As the Global Ecovillage Network (GEN) aims to bring about positive change and a society's transition to resilience, it is hoped that this research will indirectly contribute to reform government policy in order to move towards sustainable development and societal resilience. In this endeavour, GEN would want to involve more ecovillages and ecovillagers as co-researchers in all phases of follow-up research projects. While less objective than the norm in scientific research, this study is not simply about ecovillages, but also by them, illuminating their foresight, not previously academically recognised.

3. Results

3.1. What is different?

Twenty different areas of elements are listed below which are typical in ecovillages, but rare or absent in most industrial, urban cities and even in contemporary rural settlements. These are assumed to contribute to a high level of wellbeing in ecovillages (Diagram 1).

3.1.1. Pooled economy

Security is a factor in wellbeing and a community of common pooled resources provides more stability than individual incomes. Solidarity and shared wealth create cohesions and a community's identity. While there are cases of ecovillages like Crystal Waters, which have very little of a communal economy, most ecovillages have completely or partially pooled economies. Examples of completely pooled economies are Kommune Niederkaufungen, Bagnaia Ecovillage and at times, Svanholm Ecovillage. The commune of Bagnaia has a completely communal economy with

the common ownership of buildings, land and machines. All members at Bagnaia receive a monthly standard communal wage of 150 Euros. Tamera Ecovillage has a similar form of communal economy.

3.1.2. Shared work

Residents working side by side create a strong sense of community and belonging, but this has almost entirely disappeared in modern urban society. Grinde (2009) points out that in Paleolithic tribes, there was no difference between paid work and work at home, perhaps not even labelled as work, just a part of life. The results of toil were consumed or bartered to fulfil apparent needs. Sharing the harvest or catch was normal. In an industrial, urban society, joint efforts and sharing are not obvious. Ecovillages with strong community relations can facilitate sharing. The olive harvest in Tamera, or the wheat harvest in Città de la Luce are examples of regular joint communal efforts. Damanhur's creation of the monumental underground temple complex is however, a classic example of shared work that creates identity and community.

3.1.3. Work-life balance

The UK All-Party Parliamentary Group on Wellbeing Economics reports that working more than 55 h/week is negative to wellbeing, while offering flexible working hours to employees has a positive impact (Wellbeing in four policy areas, 2014). The same report confirms that worker's influence in the workplace has a positive impact and that shorter hours have been linked to increased productivity.

People are often attracted to ecovillages as a way to leave the "rat race" and gain balance in life.

Ecovillages normally encourage down-cycling and working a minimum of employment hours just to guarantee basic needs. Suderbyn's policy of offering a maximum of half-time employment was used to ensure task and work-time diversity and allow room for volunteerism. Its move to a common salary level of 25,000 SEK/month enhanced "felt fairness" with its new fair pay policy. Sharing employment evenly throughout an ecovillage becomes a sensible position to take, as everyone in the community is overtly interlinked and all inhabitants benefit when everyone can access some paid employment, gaining sufficient income to pay for each one's own share of the common costs.

3.1.4. Inclusive decision making

Ecovillages use a number of different decision-making methods which mostly involve everyone's participation and are designed so that everyone is seen. A normal technique used prior to a decision is going around the circle of persons present to hear each person's opinion. "Taking the temperature" with a thumb up, down or in between before a decision is made allows a chance to adjust the text of a decision to accommodate everyone. Many ecovillages use consensus, especially small communities. Grinde (2009) found that decision-making by consensus, rather than by voting, generates more support for the initiatives in question. Larger communities may use systems that still allow for everyone to be heard, but may not be able to keep to a strict consensus. Consensus minus one is a way to prevent a community from being "held hostage" by one member. Recently, interest has grown for anti-hierarchic decision-making models such as sociocracy and holacracy (for further information explaining the decision-making systems in ecovillages, see Hall, 2013).

3.1.5. Conflict resolution

Solving discord in one's daily social life is important for wellbeing. In modern society, conflicts remain unresolved due to the lack of interdependence. These conflicts are resolved in ecovillages as they appear at least as frequently as in the rest of society; they are noticed by others in the community, and their existence has a negative impact on others not involved. Therefore, intentional communities have had to develop tools and techniques for conflict resolution such as non-violent communication, fish bowl, constellation and forum. Grinde (2009) proposes that humans are stressed in our modern urban society and that in conditions closer to our evolutionary norm, such as a tribe-sized ecovillage, a community's human behaviour can be manipulated towards benevolence and compassion, and away from selfishness and aggression. In theory, he further suggests it is possible to induce more kindness and more compassion in a community than typical for Stone Age tribes, but such an effort requires resoluteness. Human versatility is, however, restricted by a set of "elastic limits" defined by our genes (Grinde, 2009). The ZEGG ecovillage has developed its tool of a "Social Forum" for conflict resolution and personal development. The Tamera ecovillage has experimented with it further in attempting to eradicate jealousy, a basic tenet of its peace research efforts.

3.1.6. Limited hierarchy

Be it because ecovillagers are predominantly non-conformists, anti-authoritarians or that the dominant ideas of natural cooperation and permaculture suggest decentralised and self-regulating units, ecovillages are seldom hierarchic. Direct democracy, large communal meetings, working groups and committees seem to be the normal form of management in ecovillages. Inhabitants staff these structures on a volunteer basis. Larger ecovillages have employees which execute the will of the communities and are answerable to the same.

While not true for some communities with one spiritual path and a single spiritual leader, most ecovillages have flat organisations with rotating leaders elected by the residents. Most of the larger ecovillages have structured systems of membership that do create divisions between categories of members. Damanhur has different categories of members (e.g. A, B and C citizens) with different roles and responsibilities, yet its leadership, the King's Guards, are elected. At Findhorn, newcomers have to go through a series of courses taking around 2 years to become members of the Findhorn Foundation.

3.1.7. Dimensioned communal group

Social relationships and community cohesion are key factors to our wellbeing (Wellbeing in four policy areas, 2014). Ecovillages have formed spontaneously around the world in connection and in part due to dissatisfaction with the scale of modern society. Grinde (2009) sees the connection to the close-knit tribal world of the Paleolithic era being replaced with nuclear families that are inside a larger relatively weak and unstable social network, to which our biology reacts negative. Ecovillages down-scale a community so that individual members can form emotional bonds with the other members, and create a social life around a larger communal group, not just the nuclear family. Ecovillages incorporate attributes that resemble a tribal way of living that is more in keeping with our evolutionary history (Grinde, 2009). Some ecovillages set clear limits to community growth. Others choose a modular approach, creating new working teams and living groups when the group expands. The "Federation of Damanhur" is as the name suggests, a large number of collective living "nucleo" located in several adjoining villages. The Sieben Linden ecovillage has been expanding steadily, adding a bigger house each year. There, living groups are formed, often originating in make-shift circles of caravans which design and plan their future home together. One recently built structure was designed as one flat on two floors for 15 persons. Eventually the residents realised that it was socially over-dimensioned, and that 15 persons sharing one kitchen was just too difficult and stressful to maintain. In the end, the house was converted into 3 communal flats for three to eight residents.

Associated with the formation of communities and sub-groups are a number of common cultural behaviours such as common salutations/greetings, regular dinners, celebrations, meetings and ceremonies. These are ways of achieving positive relations and helping make a group of people function well together (Grinde, 2009). Damanhur inhabitants use "con te" – "for you" – as a greeting to signify that they care about each other. Sharing meals and other positive experiences helps to develop relationships (Grinde, 2009). Kommune Niederkaufungen has most meals as a community, but Sunday evenings are reserved for meals in the smaller living groups. Regular men's and women's saunas in the Kovcheg ecovillage are important for community dialogue. Livonsaari Ecovillage found saunas to be so vital for developing their ecovillage that seven saunas were functioning before the completion of the first house.

3.1.8. Celebration

Wellbeing is connected to social context, where group identity and belonging are significant factors. Celebrating together has more impact on wellbeing than the apparent relaxation and enjoyment of food, drink, music, dance and conversation. Celebrations of birthdays, anniversaries, births and weddings divide life into memorable periods of time. Many ecovillages are attracted to create new celebrations that are not linked to highly commercialised mainstream holidays. Solar and lunar phases, harvests and planting are common ecovillage celebrations. Work-related celebration is important for groups as well. Dragon dreaming and the Oasis method of ELOS are two project or community mobilisation methodologies associated with ecovillages which include a final step of celebration. Celebrating functions as a mindful reward for previous efforts, marks the completion of a stage and becomes a positive memory of the project completed.

3.1.9. New values and common worldview

The key to allowing happiness and wellbeing to be the focus of a community is an alternative set of values and views which are separate from those predominant in Western society. A new common set of values related to the paradigm shift of what Joanna Macy calls the "Great Turning" is found in most ecovillages. Ideas related to deep

ecology, social ecology, deep democracy, voluntary simplicity or permaculture can be expected to be shared by most inhabitants in many ecovillages. It is these common set of values which allows the Global Ecovillage Network to bring radically different types of ecovillages together in one network. An example of this is the simple living in Krisna Völgy in Hungary, elected by the ecovillages of Europe as winner of the GEN′s 2012 Ecovillage Excellency Award, which allows the community to achieve a high level of wellbeing with a fraction of the standard European ecological footprint.

Many ecovillages have a common community worldview. These differ between communities and while some are spiritual, others are political, and some are a more primitive set of ideas on sustainability and humanity. There is a connection between existential worldview and wellbeing, and spirituality and ecology are linked and are group processes (Pluta, 2012). Many rapidly-developing ecovillages have religious or spiritual doctrines. Research shows that religions not only have a potential for making people happy, but they facilitate the acceptance of community rules. Grinde suggests that the human brain has evolved to allow religiousness to improve social cohesion (Grinde, 2009). Regular practices and rituals can build group identity and belonging.

There are a number of ecovillages that share spiritual or ideological paths. The Anastasian ecovillages inspired by the books of Vladimir Megre are dominant in Eastern Europe. ISKCON eller Krishna-ecovillages are found all over the world. Anthroposophical Camphill and non-violent L'Arche movements unite another major group of ecovillages integrating disabled persons. The Kommunja network represents another group of political communes. Green Phoenix is a network of larger spiritual ecovillages. One of its members, Damanhur, is perhaps one of the best examples of an ecovillage with one common spiritual path which has evolved into a complex set of beliefs that branch out into art, medicine and culture.

3.1.10. Deeper personal relationships and openness

Loneliness and lack of belonging have become very common today, yet according to Grinde (2009), not prevalent under human evolution. Social relations provide the "brain rewards" felt when falling in love, feeling love, associating with friends, and engaging compassionately in the life of friends and neighbours. Relations with other humans are possibly the "most potent source of good feelings" which can add to a high level of wellbeing (Grinde, 2009). Thus, it is possible to promote a positive feedback cycle where happy, satisfied people amplify compassion and geniality in their surroundings in an upward spiral. Ecovillages are ideal platforms to cultivate such upward spirals.

Ecovillages seem to offer more meaningful social relations, which are decisive for promoting a high level of wellbeing. Many ecovillages are able to deal openly with mental illness problems which are not acknowledged in the larger society. In using tools like social forum, deep listening and having a non-judgemental attitude, ecovillagers seem to be able to create deeper relationships and gain wellbeing. The social forum of ZEGG, Forum in Tamera, and Intensive community weeks in Sieben Linden and Tamera (where they may move to common quarters for the week) are hallmarks of this deeper connection between community members. Simpler techniques such as "check-in" and group sharing allow for residents to talk about their current emotional state. Many ecovillagers try to use non-violent communication as a method to achieve deeper communications and avoid creating conflicts based on unconscious verbal aggression. Simply put, non-violent communication is a way to expose our real needs to each other, while also informing our co-inhabitants about how they may be unknowingly hurting each other. Ecovillages as clearly defined and demographically limited settlements make it possible to see if a critical mass of non-violent communication can improve community wellbeing.

3.1.11. Physical contact

Physical contact complements verbal connections. Skin-to-skin contact where people hug each other facilitates wellbeing. Many communities may embrace more often when greeting each other than in mainstream communities. Creating circles of people physically joining hands has become a standard feature in GEN gatherings. Circles, mainly before meals to appreciate the food, hear about the ingredients and acknowledge the work of the cooks as a tradition of ecovillages in many places. Perhaps it is the Findhorn ecovillage, with its "tuning in" and "tuning out" of every working session, that practices highly frequent physical contact combined with mindfulness. Games are used to break up long meetings of sitting still, and many involve touching, holding hands or hugging. Group massage, where a circle of more than one hundred persons massage the shoulders of the person in front of them, while receiving a massage from the person behind them, is a common practice. It should be noted that such an activity facilitates social contact,

builds community, relaxes muscles, and gives a boost to personal wellbeing. Embracing at the close of many sessions is as quite well common in the ecovillage movement.

3.1.12. Child-centred perspective

If the idea of wellbeing is to be introduced as the overarching objective in society, the more open-minded next generation of adults would be the easiest segment of the population to start with. As children gather together at kindergartens, schools and youth clubs, promoting a focus on wellbeing this may not just be beneficial to achieving a higher level of wellbeing, but also socio-economically efficient in reducing social costs and the economic waste of creating maladjusted citizens. Thus, caring for the development of children's emotional wellbeing is an important cross-cutting issue for any national wellbeing strategy. Disregard for children's emotional wellbeing today can be linked to a high prevalence of anxiety (Grinde, 2009).

Our modern disconnect with children is very new. Historically, children have always had intensive contact with their parents. Children were carried around, brought to the fields, played and worked in workshops next to their parents, and slept in close quarters near their parents. Our modern society actually encourages separation and delineation between children and parents. Day care centres, schools with after-school child care, and government recommendations encourage this, for example, about 70% of all children and 93% of children in Sweden between 10 years and 18 years old have their own room (SLL 2012 and SCB/Boverket, 2014).

In ecovillages, work and leisure are more intertwined and the workplace and home are physically in close proximity. Children's contact with their parents in work places is more frequent than what can be expected in urban environments. Ecovillages, many times with car-free environments, encourage smaller children to move freely around in the settlement, from home to work places and other social venues. The Sieben Linden ecovillage emphasises children's activities and has had a tradition of bringing children's groups along with the adult groups to GEN's international events. Many ecovillages adhere to the adage that a child needs 100 parents, meaning the many diverse role models which an ecovillage community can offer. However, allowing other adults to be involved in teaching children values is often sensitive.

Not all ecovillages emphasise increased parent–child contact. Comunidad del Sur in Uruguay emphasises the need for a youth house separate from the adults. A similar solution exists at Tamera Ecovillage. In Sieben Linden, the Jule youth living group now includes a separate social space for teenagers and young adults.

3.1.13. Self-development practices

Most ecovillages, as well as the global standardised Ecovillage Design Education curriculum, emphasise the need for personal development and reflective practices. Meditation and yoga are thus quite common as communal and individual practices in ecovillages. The Findhorn ecovillage, while not having one spiritual path, has daily meditation sessions in The Park open for foundation members, guests and the surrounding community. Findhorn is perhaps the most developed ecovillage organiser of courses in personal development. Starting with Experience Week, the Findhorn Foundation and its Findhorn College give a series of courses at its Cluny Hill facility and the Isle of Erraid centre, which is an entry way to ecovillage membership as well. Most larger ecovillages have such introductory courses, while smaller ecovillages may organise weekends and open house days to allow visitors to understand what the ideas of the community are. Damanhur's Game of Life represents part of an internal self-development process for its members to go further in their own development.

Mindfulness is promoted in a number of ecovillages and is linked to both wellbeing and ecologically responsible behaviour. Mindfulness is a state of consciousness that actively focuses on an awareness of internal states and external realities (Pluta, 2012). Increased mindfulness has been associated with decreased financial desire, reducing the gap between wealth attainment and aspirations (Pluta, 2012). Increasing mindfulness leads to an appreciation of what one has, thus providing greater wellbeing. Mindfulness can be a relevant method which can be used in mainstream society to improve emotional wellbeing in "whole person care", particularly in educational and health-related services (Wellbeing in four policy areas, 2014). Many ecovillages use the practice of a minute of silence prior to beginning a meeting so that "everyone has the chance to arrive in the moment". "Check-in" rounds are used as well at meetings and gatherings to allow participants to acknowledge anything weighing heavily on their mind so that they can better put it aside and be "in the moment". Findhorn's tradition of "tuning-in", usually with participants holding hands in a circle at the beginning of each work session, has the same purpose. By allowing participants to acknowledge issues on their mind, they are able to release these issues for the moment, helping everyone focus on the tasks at hand.

3.1.14. Inclusiveness

Wellbeing in ecovillages emphasises that everyone needs to participate, be seen and be heard. It has been suggested that ecovillages attract persons that have not fared well in mainstream society and that many would classify as "difficult" to cooperate with. Ecovillages have, however, been able to include these persons and find solutions for the discord created. Thus, persons with a low level of wellbeing are being included in ecovillages and effectively increasing their wellbeing. This process is desirable to be replicated in the mainstream as an efficient use of state resources, and perhaps for a reduction in state costs for hospitalisation and incarceration.

Larger ecovillages have more capacity, procedures and resources to integrate persons of with low wellbeing. Smaller ecovillages may have time to give individual attention to needy persons, but may not have the range of competences needed, especially if the low wellbeing is connected to mental health issues. Low wellbeing due to a lack of financial means is easiest to remedy in ecovillages, as the communal approach with sharing can provide a good standard of living at reduced financial costs.

The Camphill and L'Arche movements have inclusion as the basis of their ecovillages. They create micro-societies where persons with disabilities are able to be fully integrated into functioning social systems free from the exclusion often felt in mainstream society.

3.1.15. Emphasis on arts and culture

There is evidence that experiencing arts and culture is directly associated with higher wellbeing, and has impact on the key drivers of wellbeing, similar to health and income (Wellbeing in four policy areas, 2014). Arts are especially important for aiding low wellbeing, for example, in homes for the elderly and in youth detention centres. Art and culture can break social isolation and increase community cohesion, thus increasing a sense of wellbeing.

Ecovillages often have an emphasis on culture, particularly participatory arts rather than audience arts. One such expression of this is jam sessions, where participation is more valued than talent. The important aspect is that everyone is involved in producing one musical experience. Similarly, the Krisna Völgy community hosting the GEN Conference 2012 was able to involve several hundred guests in their rhythmic dance session for a cohesive group experience. Other ecovillages use culture as one of the main social "glues", such as the Kovcheg ecovillage's numerous choirs, music groups and dance groups. Damanhur similarly emphasises cultural performance and its own genre of various arts. The ZEGG ecovillage also focuses on artistic expression, and radical participatory human art was part of the history of Tamera ecovillage.

3.1.16. Healthy food

A high level of wellbeing is connected to appreciating food and eating healthy. Ecovillages use common dinners as important components of community cohesion and food issues are often the basis for the creation and dissolution of ecovillages. Most ecovillages favour vegetarian, vegan, and organic cooking. Circles of residents holding hands to appreciate the food prepared are relatively common tradition in ecovillages. The Findhorn ecovillage showed its appreciation for the luxury of real coffee and oranges by only serving them in the Community Centre on Sundays. Sieben Linden hosts a monthly café for its surrounding villages, where coffee and cake are a major attraction for both residents and neighbours.

3.1.17. Physical activity

Physical fitness and regular physical activity is an important factor of wellbeing. Ecovillages promote walking, biking and physical work on a daily basis, which supports a high level of wellbeing. The Suderbyn ecovillage decided from its inception that biking to and from nearby Visby would be strongly encouraged, making bicycles available for guests and hosting a Swedish Cycle Advocacy Association bike repair station for passing bicycle tourists. Physical games in the form of "ice-breakers" and "energisers" are often used in connection with ecovillage gatherings and meetings to increase blood circulation, alertness and social contact.

3.1.18. Proximity to nature

Time spent in nature has been shown to improve cognitive and physical health, and components of wellbeing (Pluta, 2012). Ecovillages with few exceptions, always offer closer regular contact with nature than what is possible in urban areas. Pluta (2012) points out that when we are immersed in nature, intrinsic motivations increase as feelings of autonomy and nature-relatedness increase. This in turn results in enhanced ecological behaviour. The Scheibenalp

ecovillage has been able to build up a health-oriented herbal tea business based on their wild collection from the surrounding alpine nature. The Sieben Linden ecovillage has now launched its forest kindergarten, which not only serves its own children, but attracts children from the region. The Lakabe ecovillage, Spain's oldest, embedded in rural mountains, has learned to build self-reliance in symbiosis with the rugged nature surrounding this once-abandoned traditional village.

3.1.19. Environmental activism

Wellbeing is related to the feeling that one's life has meaning, significance for others and one's surroundings. Research shows that environmental activists tend to have a higher subjective sense of wellbeing (Pluta, 2012). Ecovillages in general are no longer isolated from the larger society, but actively participate in its transformation (Hall, 2014a, 2014b). In fact, ecovillages function as bases for environmental activists. Many ecovillages are involved in their neighbour town's transition movement. The Lets Do It! clean-up movement is strongly connected to the ecovillage movement, such as the national networks of Estonia and Slovenia. The Trees for Life NGO has been a long-term effort based at the Findhorn ecovillage to re-forest the Scottish highlands. Dąbrówka Ecovillage near Lublin is one of the main advocates against GMOs in Poland through the International Coalition to Protect the Polish Countryside.

3.1.20. Ecologically responsible behaviours (ERBs)

Using reusable bags, turning off lights not in use, and climate-friendly foods, eco-mobility, and household choices with low ecological consequences are ecologically responsible behaviours (ERBs). Wellbeing is positively correlated with ERBs (Brown & Kasser, 2005). Such behaviour is guided by the possession of intrinsic values which Kasser and Ryan (1996) identified as those that orient a person towards personal growth, relationships, and community involvement. Ecovillages, through community rules as well socially-reinforced intrinsic values, intensify and encourage positive choices for changing behaviour. These choices become part of a positive feedback loop that creates more positive feelings and a higher sense of wellbeing. Thus, wellbeing facilitates ERBs, and ERBs in ecovillages create wellbeing. It is hard to imagine ecovillages that do not emphasise particular ERBs, but noteworthy are those cases where ERBs are not followed in ecovillages, such as talked-about cases of smuggling meat into vegan Tamera, copper roofing in Findhorn's field of dreams, excessive use of fossil fuel cars within Damanhur or the insistence on flush toilets in Krisna Völgy. If the non-ERBs are perceived as such by the residents, then negative feedback loops would counteract positive feelings, reducing wellbeing. While the first example apparently causes community frustration, thus lowering wellbeing, the latter three may not be viewed as problems by the residents, and may not detract from community wellbeing.

3.2. How is it done?

John Helliwell contends that the 'how' of wellbeing policy delivery is as important as, or even surpasses the 'what' of wellbeing policy initiatives (Helliwell, 2014). Ecovillages are designed to enhance wellbeing and the decision-making process requires due consideration on how to provide their inhabitants with wellbeing. However it is built, the combination of human, social and natural capital seems to be the determinant of wellbeing in an ecovillage, just as it is in conventional society (Mulder, Costanza, & Erickson, 2006). Easterlin (2003) showed that increased time focused on social relations and a healthy lifestyle would deliver more happiness than increased income. Time is available due to reduced commutes, less outside employment and less need for a cash income. Mulder, Costanza, and Erickson (2006) show that ecovillages are able to reduce material throughput and energy use and still produce a higher level of wellbeing. Thus, they conclude that ecovillages are models for sustainable development that should drive a shift in governance decisions in the wider society. Mulder et al. suggests that ecovillages are able to contribute to a higher level of wellbeing than normal communities because they have a different balance of built, social, human and natural capital. In ecovillages, built capital is substituted with other forms of capital which provide a greater sense of wellbeing at a lower environmental cost.

3.2.1. Built capital

Ecovillages address wellbeing and place in an integrated manner, as inhabitants try to solve each issue as it arises in a holistic way. Such an integrated approach to decision-making includes living spaces, work places/employment oppor-

tunities, infrastructure and mobility needs, equipment and appliances, social inclusion, access to nature and physical activity (walking, cycling). Having detailed knowledge of individual realities makes for better decisions on investments with an acceptable amount of negative impact on other areas affecting wellbeing. At the same time, Mulder et al. (2006) find that built capital, including purchased and rented goods, are the weakest determinant of wellbeing. Ecovillages in general will have both less available financial capital to invest and will tend to not prioritise built capital investments.

Spatial planning is important both in ecovillages and the larger society to create a high level of wellbeing. The permaculture vector and zone planning common in many ecovillages dictate that planning should be based on proximity to the inhabitants' "zone 0" living spaces. Areas that the inhabitants need to visit daily are closer than those just annually visited. Anastasia ecovillages, on the other hand, are often designed as a grid iron of streets dividing the one-hectare "kin's domains" or small family farmsteads.

Mulder et al. (2006) found a slight correlation of residents in urban areas having a higher level of wellbeing when using less sustainable transport. In ecovillages, a higher level of wellbeing is connected to using sustainable transport (walking/cycling). As commutes have a negative effect on wellbeing (Wellbeing in four policy areas, 2014), accessibility rather than mobility itself needs to be the focus. Ecovillages which organise access to goods and services *in situ* catering to the needs of the residents reduce commutes to nearby towns to shop. Findhorn's The Blue Angel Café and Phoenix Community Store or Damanhur's Welcome Centre and CREA help ecovillages in those areas by making it less necessary to travel to nearby Forres or Ivrea for small purchases or a relaxing coffee break. Visionary "whole place" spatial planning has been carried out in some ecovillages where there was a complete plan, such as the Cloughjordan ecovillage in Ireland. Many ecovillages are planned in stages and slowly and organically grow allowing each step to be well thought-out and supported beforehand. "Whole Place" community budgeting, positive for wellbeing, is a normal component of planning and budgeting in ecovillages (Wellbeing in four policy areas, 2014).

3.2.2. Human capital

The high level of wellbeing in ecovillages is augmented by relatively strong interest in investing in human capital, in the form of education and self-development. Efficient human resource management is also common in ecovillages, as it is human capital that is available and known. Intensive social contacts and social capital allow for the matching of human resource supply and demand, with respect for work-life balance and a reasonable distribution of income opportunities. Ecovillagers know that it is negative for the community if a fellow ecovillager is not able to meet financial obligations, thus it is in the community's interest to ensure a distribution of opportunities so that everyone is included. This would be reflected at a national level with the concept of steady-state economics, which is important for well-being. Both growth and recession are negative for wellbeing, as they create stress in the form of over-working or unemployment (Wellbeing in four policy areas, 2014). The most effective means of raising the general level of wellbeing is to reduce wellbeing inequality (Wellbeing in four policy areas, 2014). Ecovillages, by implementing the ethic of "fair-share" in reducing inequality, are successful in creating a high level of wellbeing. As previously mentioned under Work-Life Balance, ecovillages have often solidarity-based salaries which try to ensure at least similar base income for all the ecovillagers.

3.2.3. Social capital

Research on improving wellbeing has mainly focused on individuals and on fixing personal problems. Focusing on building happier lives through improved social interactions is a more effective way of improving wellbeing (Helliwell, 2014). Social relationships and social capital are some of the best predictors of a high level of wellbeing (Stoll, Michaelson, & Seaford, 2012). Ecovillages enable intensive social relations and then use conscious processes, methods and tools to create social capital. Social context which is of fundamental importance is created in the ecovillage community. Encouraging everyone's participation, caring for children's emotional wellbeing, cultivating a non-judgemental attitude and dealing openly with mental illness problems are some of the ways ecovillages work to break down isolation and build social capital. By promoting mindfulness, sharing, deep listening and self-development, ecovillages are able to create a high level of wellbeing and resilient communities that are ready to prevent or mitigate negative impact on members and the whole.

3.2.4. Natural capital

Ecovillages, per definition, are often endowed with access to natural capital in the form of land, forests, water, soil, minerals and fresh air. Ecovillagers tend to use local resources both for the extrinsic value of the natural resources

themselves (food, building materials, medicine) and for the other intangible benefits of coexisting with nature as well. Wilson argues that the spiritual/mental values exceed the extrinsic value, aiding feelings of health, cognition, well-being and community, a hypothesis supported by human preferences for a natural environment including lawns and gardens, house plants, pets, etc. (Pluta, 2012). Already positive to nature, ecovillagers are perhaps able to gain a better sense of wellbeing from contact with nature than other compatible groups. Similarly, the ideas of nature conservation and permaculture encourage the sustainable or even regenerative use of natural resources for food, building materials, water purification, etc. Cradle-to-cradle thinking promotes the idea that there is no waste and permaculture sees multiple use and value in every natural element. This results in the efficient use of natural capital to create wellbeing.

4. Discussion

Using the ecovillage experience as an evidence base for national wellbeing strategies has several problems. An integrated, coherent life experience is very much the ideal rather than the reality for most working people. Ecovillages have not attracted the masses yet, but rather a selected group of motivated individuals. This is because life choices are made with due consideration for many factors and risk assumptions. Immediate satisfaction has a stronger influence than optimal choices. Grinde (2009) suggests freedom reflects immediate desire, while geniality is more in one's long-term interest. The Renaissance saying "Stadtluft macht frei" seems to hold today; the attraction of the bright lights of the cities and associated personal independence may satisfy many common desires. Any attempt to restrict people's freedoms to improve their quality of life is doomed to fail as did Julius Nyerere's Ujamaa experiment in Tanzania. The best policy is to spread information and raise awareness about what brings about happiness, which in turn, strengthens the making of intelligent, informed decisions.

Helliwell and Huang (2010) found significant differences between the measures of life satisfaction and job satisfaction within the same respondent group. This means that life satisfaction could be low, while job satisfaction is high or the opposite. It is the process itself that determines satisfaction, not just the final outcome. Material deprivation, insecurity and social isolation are causes for a low level of wellbeing. A low level of wellbeing can be increased effectively with smaller costs. Fair pay is more important than absolute income (Wellbeing in four policy areas, 2014). Ecovillages allow ecovillagers with a lower income to achieve a higher level of wellbeing by substituting social capital for mainly built capital, and publicly built capital instead of privately built capital. National strategies for wellbeing should mainly focus on low wellbeing, as these contributions are most effective and simple for public sector management. A high level of wellbeing requires more active pro-social behaviour of the individuals or communities concerned. The ecovillage movement collaborates with other like-minded movements through ECOLISE (www.ecolise.eu) spreading values for wellbeing, an asset for developing national wellbeing strategies.

It is the attitude of ecovillagers which makes a high level of wellbeing possible. Propagating the attitudes, perceptions and values of ecovillagers throughout the general populace should be the focus of national wellbeing strategies. Promoting pro-social behaviours, advocating the fundamental importance of trust as social glue, and valuing the social context in wellbeing can be the basis for a variety of policy applications (Helliwell, 2014). Research needs to focus on building the evidence base for improving the social context to achieve wellbeing in the community. Further research is needed to understand the flourishing of Ecovillages. Are there more individuals flourishing in ecovillages than in mainstream society and if so, what are the specific conditions that enable and promote it?

The focus on national wellbeing strategies is connected to building resilience in society for anticipated disturbances due to climate change, environmental degradation and the associated economic and political instability. Adaptive governance with a diversity of approaches to implementing wellbeing policy is an effective way of identifying good solutions. Adaptive governance allows for shorter feedback loops to ensure that policies are monitored and adjusted in the short term. Ecovillage experiences offer a rich and diverse evidence base for ways of creating wellbeing and several of these approaches ought to be tested in parallel.

5. Conclusion

The conclusion this paper makes is not that ecovillages have found a complete solution to achieve wellbeing that can be easily transferred to large-scale societies. Instead, it is that ecovillages definitely have experimented with creating individual and community wellbeing for up to a half century and there is definitely evidence to be studied which would benefit society in general. However, this rich evidence base has only been marginally researched. It is relatively simple

to compare wellbeing between ecovillages and their surrounding areas, but such studies have not been carried out in sufficient quantity.

While imparting their residents with a high level of wellbeing is the main aim of ecovillages, the enabling environment of ecovillages gives rise to flow or flourishing, a measurable state of high wellbeing. Very little research has been done on the elements needed to facilitate attaining a flourishing state. There is unfortunately no research yet on flourishing in ecovillages; ecovillages appear appropriate venues to study creating enabling, community environments for flourishing.

At the other end of the scale, wellbeing can most effectively be spread to those with a very low sense of wellbeing. In some cases it may involve built capital, but mostly it is about facilitating social relations through an improved social context. Meeting points where social capital can be created are extremely cost effective. The transition movement working in poorer areas does just this—helping people to meet neighbours, build their community and create a healthy interdependence. Such networking in the community can channel natural and human capital to the right places in order to raise wellbeing as well.

There is certainly much to be learned that can inform national wellbeing strategies. In this paper, twenty elements have been discussed which contribute to wellbeing in ecovillages: pooled economy, shared work, work-life balance, inclusive decision making, conflict resolution, limited hierarchy, dimensioned communal group, celebration, new values and common worldview, deeper personal relationships and openness, physical contact, child-centred perspective, self-development practices, inclusiveness, emphasis on arts and culture, healthy food, physical activity, proximity to nature, environmental activism and ecologically responsible behaviours (ERBs). At the same time, research is lacking about which elements of "ecovillage culture" are crucial for a high level of wellbeing and how scalable or transferable these practices are to mainstream society.

Acknowledgements

Appendix A

Ecovillages and ecovillage networks referenced

Crystal Waters	http://crystalwaters.org.au
Cominidad del Sur	http://www.ecocomunidad.org.uy
Tamera	http://www.tamera.org
Lakabe	http://sites.ecovillage.org/en/lakabe
Damanhur	http://www.damanhur.org
Cittá della Luce	http://www.lacittadellaluce.org/it
Comune di Bagnaia	http://www.aamterranuova.it/MappaEcovillaggi/LA-COMUNE-DI-BAGNAIA
GEN Slovenia Network	http://gen-europe.org/activities/news/news-detail/artikel/slovenian-ecovillages-no-time-to-waste/index.htm
Krisna Völgy	http://krisnavolgy.hu
Dąbrówka	http://www.dlaziemi.org/ekowioski.php
ZEGG	www.zegg.de
Sieben Linden	www.siebenlinden.de
Niederkaufungen	http://www.kommune-niederkaufungen.de
Findhorn	www.findhorn.org
Cloughjordan	www.thevillage.ie
Svanholm	www.svanholm.dk
Suderbyn	www.suderbyn.se
Livonsaari	http://www.livonsaari.fi
GEN Estonian Network	http://kokkutulek.kogukonnad.ee
Kovcheg	www.eco-kovcheg.ru
GEN Europe	www.gen-europe.org
GEN International	www.ecovillage.org

References

Beal, D, & Rueda-Sabater, E. (2014). Building wellbeing into national strategies. Boston: Boston Consulting Group.

Brown, K. W., & Kasser, T. (2005). Are psychological and ecological well-being compatible? The role of values, mindfulness, and lifestyle. *Society Indicators Research, 74*, 349–368. doi:10.1007/s11205-004-8207-8.

Diener, E. (2009). *Subjective well-being. The science of well-being* (pp. 11–58).

Easterlin, R. (2003). Explaining happiness. In *Proceedings of the National Academy of Sciences of the United States of America: 100* (pp. 11176–11183).

Grinde, B. (2009). An evolutionary perspective on the importance of community relations for quality of life.. The Scientific World Journal, *9*, 588–605.

Hall, R. (2013). The enterprising ecovillager. Achieving community development through innovative green entrepreneurship. http://balticecovillages.eu/enterprising-ecovillager-achieving-community-development-through-innovative-green-entrepreneurship.

Hall, R. (2014a). Una transición hacia la resiliencia liderada por la comunidad en Europa. *Revista Ecología Política,, 47*, 82–86.

Hall, R. (2014b). Økosamfund kan medvirke til at transformere landdistrikerne. Økosamfund i Danmark #76 (20-21) http://issuu.com/okosamfund/docs/3434_okosamfund_i_danmark_efteraar2/0

Helliwell, J. F. (2014). Chapter 5: Understanding and improving the social context of well-being. In Timo J. Hämäläinen, & Juliet Michaelson (Eds.), *Well-being and beyond: Broadening the public and policy discourse* (pp. 125–143). Cheltenham: Edward Elgar Publishing.

Helliwell, John F., & Huang, Haifang (2010). How's the job? Well-being and social capital in the workplace. *Industrial and Labor Relations Review, ILR Review, Cornell University, ILR School, 63*(2), 205–227.

Huppert, F., & So, T. (2009). What percentage of people in Europe are flourishing and what characterizes them? Retrieved 30 October 2014 from http://www.isqols2009.istitutodeglinnocenti.it/Content_en/Huppert.pdf.

Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin, 22*, 280–287.

Mulder, K., Costanza, R., & Erickson, J. (2006). The contribution of built, human, social and natural capital to quality of life in intentional and unintentional communities. *Journal of Ecological Economics, 59*, 13–23.

Oort, F. (2005). Using structural equation modeling to detect response shifts and true change. *Quality of Life Research, 14*(3), 587–598.

Pluta, A. (2012). *Integrated wellbeing: Positive psychology and the natural world*. Philadelphia: University of Pennsylvania.

Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and wellbeing*. New York: Free Press.

Stoll, L., Michaelson, J., & Seaford, C. (2012). *Wellbeing evidence for policy: A review*. London: NEF.

Wellbeing in four policy areas: report by the All-Party Parliamentary Group on Wellbeing Economics. (2014). www.parliamentarywellbeinggroup.org.uk.