

Ecovillages as Community-Scale Living Classrooms of Sustainability

In practice, the concept of the “ecological settlement” is a multi-faceted one, encompassing the qualitative improvements of open spaces, traffic limitations, new social relationships and forms of organisation, strategies of energy and water efficiency, building biology criteria, the recycle-ability of building materials, aesthetic qualities and new cost/benefit analyses. What unites all these aspects, however is that they strive for, and to varying degrees attain, an optimization of the whole, rather than a maximization of individual parts, and thus a new quality of housing and indeed life itself (Kennedy & Kennedy, 1997, p.221).

For over four decades ecovillages have provided living experiments in the creation of more sustainable communities. They are community scale laboratories of social and ecological invention (Dawson, 2006). Ecovillages are testing grounds for ecological and renewable energy based technologies, offering opportunities for the application of new and old methods for strengthening local and regional economies. Such intentional communities have developed and applied a wide range of socially useful ‘sustainability software’ which helps people to communicate more effectively and non-violently with each other, to make consensus-based decisions, and respond to the inevitability of conflict with creativity using tested methodologies of mediation and conflict facilitation.

As such, ecovillages provide an ideal context for education for social and ecological literacy and can be seen as living classrooms for the kind of transformative education that will help us in creating a culture of sustainability. Prof. Brian Goodwin, cofounder of the Santa Fe Institute for complexity theory and initiator of the MSc. in Holistic Science at Schumacher College believes: “What we need is an education for collective living rather than for individual success. The collective to which we need to pay more attention includes all the other species of this planet, as well as the such as whether that allow their survival” (Goodwin, 2001, p.41). Ecovillages provide an ideal context in which such education can take place.

Eco-social literacy can best be communicated by example and engaging the learner as a participant in the kind of interconnected eco-social network about which one would like to create increased awareness. Fritjof Capra argues that one of the keys to increasing ecological literacy in children and people of all ages is the opportunity to experience ecological relationships and community directly through a participatory approach to learning that allows for truly transformational learning to take place (Capra, 2004). Ecovillage communities as human-scale experiments in sustainable living provide an ideal context for such transformative education.

Since “living systems are nonlinear and rooted in patterns of relationships, understanding the principles of ecology requires a new way of seeing the world and of thinking – in terms of *relationships, connectedness, and context*” (Capra, 2005, p.21). According to Capra “the starting point of designing sustainable communities may be called principles of ecology, principles of sustainability, principles of community, or even the basic facts of life” (Capra, 2005, p.23).

Ecovillage based education programmes give their participants the opportunity to experience and pay attention to such community-based principles of sustainability within a participatory learning environment. Ultimately, Capra argues that ecological literacy makes us aware of nature’s “fundamental patterns of organization: nature sustains life by creating and nurturing communities” (Capra, 2005, p23).

Robert Gilman defined an ecovillages as “a human scale, full-featured settlement, in which human activities are harmlessly integrated into the natural world, in a way that is supportive of healthy human development, and can be continued into the indefinite future” (Gilman, 1991, p.7). Robert and Diane Gilman conducted an extensive worldwide study of intentional communities, and discovered that while no perfect single example of a fully sustainable ecovillage could be identified, the overall pattern of design principles that emerge

when ecovillages on five continents are compared give an indication of what constitutes a truly sustainable community.

Recent studies investigating the ecological footprint of various ecovillage communities, the Findhorn Foundation in Scotland, Sieben Linden in Germany, and the Ecovillage at Ithaca in the United States all indicated that ecovillage residents have a significantly reduced environmental impact compared to the national average of the countries in which they are found.

An ecological footprint study jointly conducted by the Sustainable Development Research Centre (SDRC), the Stockholm Environment Institute (SEI), and the Findhorn Foundation (FF) investigated environmental impact of the FF ecovillage and its international guest programme. The study included the categories food, home, energy, transport, consumables, services, government and capital investment. The ecological footprint measure expresses the environmental impact of resources use and waste production in terms of global hectare (gha) of bioproductive planetary surface area needed to generate those resources and absorb the waste created.

The overall ecological footprint of the FF ecovillage and its guests was recorded as 2.56 gha per person. This figure is based on a weighted average between the footprint calculated for FF community residents (2.71 gha) and people on FF guest programmes (2.10 gha). By comparison, the UK per person average is 5.4 gha. The result is also significantly lower than the results obtained for the celebrated Beddington Zero Energy Development (BedZED) in London, which achieves a per person average of 3.2 gha (Tinseley & George, 2006, p.4).

Jonathan Dawson, president of the Global Ecovillage Network and resident of the Findhorn ecovillage, emphasized the ecological footprint study demonstrated “that it is possible to significantly reduce resource consumption while continuing to enjoy a high quality of life” (Dawson, 2007). John Barrett of the Stockholm Environment Institute (SEI) based at the University of York concluded: “SEI has now undertaken a footprint analysis of a number of communities across the UK and the Findhorn ecovillage has the lowest to date. We believe that everyone has something to learn from their low footprint lifestyles” (in Dawson, 2007).

Increasingly, ecovillages have recognised the important role they can play as centres for practical and theoretical centres of transformative learning. While many ecovillages have a long history of running personal development courses, during the last decade more and more ecovillages have established ‘living and learning centres’ with the support of the Global Ecovillage Network’ and have created successful programmes in education for sustainable development.

Daniel Wahl, Phd