

Bioregionalism

[Den følgende tekst dannede grundlag for workshop'en "Bioregionalism", som Permakultur Danmark (repræsenteret af Poul Erik Pedersen og Henning Hervik) afholdt på Klimaforum09_d. 18. december 2009]

Bioregions – The future of sustainable local societies?

By Henning Hervik and Poul Erik Pedersen. Agricultural eco-consultant, and landscape architect. Board members of the association Permakultur Danmark.

Permaculture as context

Permaculture is a practical and holistic strategy for environmental analysis and project design. It is based on ethics (Earth Care, People Care, Fair Shares). And it combines modern science with traditional and proven techniques, and "observing how Nature works", to create a very decent, rich, decentralised, down-to-earth approach to society building, and sustainable self-supply.

Permaculture is a grass-roots network with no central governing body, but orders itself through mutual books & references, course curriculums, and international conferences for recurrent updates. It started in Australia in the early '70ies, and has now proved itself by nearly 40 years through a wide range of activities, including ecovillages, transition initiatives, and other groups and projects in all parts of the world.

The bioregional strategy was formally included in Permaculture's "toolkit" at the international conference in Nepal, in 1991. In Scandinavia, the strategy has been promoted especially by the architect Tony Andersen, who has been working for more than three decades, seeking to introduce permaculture in urban environments, in Copenhagen and elsewhere.

In 1996, the Danish permaculture association developed a report, in response to a competition launched by the municipality of Frederiksberg in central Copenhagen, on the theme of "Sustainability for big cities". The report argued that it would be possible to create a sustainable self-supply situation for all basic resources, for the whole population of Greater Copenhagen, if using bioregionalism. The report won a 4th medal, as it was seen to be the most comprehensive and sober response of all the projects submitted, but of course also incompatible with current politics. (The report, in Danish, can be downloaded from www.permakultur-danmark.dk => Litteratur => 'Storbyøkologi på Frederiksberg').

What is a bioregion?

A bioregion may be described as: "A geographically well defined area, from and within which the domestic population may provide for all their basic needs". – And in the context of a permacultural approach, one would add: "... within the boundaries and on the basis of a sustainable administration of all resources". Basic needs would comprise e.g. drinking water, food, feed, fertilizer, fibre (textiles), fuels, and building materials.

A typical bioregion would be the size of a county, often defined by the watersheds in the landscape. But it could also be much larger – it depends what categories of 'basic needs' we are looking at, as well as cultural contexts, etc. In the above example from the 'Frederiksberg-report', the resource supply was to be covered by the whole region of Eastern Zealand (DK)

and Southern Sweden (Scania), – app. 4 mio. people, of which app. 1 mio. live in the Greater Copenhagen area.

In a classic permaculture analysis, one would start with laying out a 5-zone mapping system, with enhanced focus on zones 0-3 (see the table below). Zones 4 and 5 will most often reach out into the bioregion, but they are still defined against the singular household, rather than – as in the bioregional approach – looking at the whole region’s resource flows as an integrated network between a multitude of households.

▪ Zone 0: The House.		<u>Example:</u>
▪ Zone 1: Used every day.		Chicken yard. Compost.
▪ Zone 2: Used regularly.	<i>Culture-</i>	Herb- and vegetable garden.
▪ Zone 3: Seldom used.	<i>expression.</i>	Orchard. Grain field. Timber forest.
▪ Zone 4: Seldom used.	<i>Nature-</i>	‘Natural forest’. Meadows.
▪ Zone 5: Never used.	<i>expression.</i>	Rainforest. Wilderness.

There are a number of necessities that would rarely be provided by a single household, but may in stead be provided by the bioregion, such as: Car repairs, Bricks for house building, Furniture, Plumbing, etc. In addition, there are a number of resources that *could* be provided by the single household, but would be more practically supplied from within the bioregion, such as: Forging, Sawmilling, Dairy products, etc. And then there is also the whole array of ‘social necessities’, such as sports facilities, education facilities, theatres, dance halls and whatnot!

Why bioregions?

The financial crisis has reemphasised the fragility of our modern society. The English have an expression, that “We are nine meals from anarchy”. – If all overseas transports were stopped tomorrow, the supermarkets would run out of foods & goods within three days, due to the limited English oil stocks. And after that – anarchy would break out! It sounds, perhaps, a little exaggerated. But perhaps not so unrealistic for those of us who have already experienced the impacts of a temporary resource shortfall, and how quickly ‘public decency’ may degenerate into warlike manoeuvrings, once the modern middle class person understands his or her wealth and comfortability to be threatened.

The first motif for applying bioregionalism is therefore as a strategy for regional self-supply, in case our modern oil-addicted transportation services might collapse. There are, however, a number of other motivations that also make it relevant to work with this strategy, regardless of any possible threats against the national transportation of goods:

	<u>Examples:</u>
1. Survival	“Nine meals from Anarchy”.
2. Resilience.	Easier adjustment to and absorption of change, coming from external sources. (E.g. rising oil prices).
3. Health.	Locally produced apples, freshly harvested, are better for your health than those flown halfway across the world, and then cool stored for a year, before selling ...
4. (Cultural) values.	Local cider, beer, cheese, fruit varieties. Local art, music, song and dancing. Local money systems?
5. Sustainability (in relation to resource consumption)	Reducing the ‘ecological footprint’ of goods, in terms of a.o. “Embodied Energy” (“Emergy”), and “Foodmiles”.

One of the salient arguments of the Transition Movement is exactly, that a bioregional approach to developing local societies will bring a strengthening of the societies' resilience, health, sustainability and (cultural) richness of values.

Two Examples

From our local situation here in Denmark, we can bring out two current examples:

One is the current attempts at the island of Bornholm to create an integrated network of producing, processing, distributing and selling milk and dairy products. In most parts of Denmark, local quality products are competed out of business by cheap mass products being wheeled in by large-scale, international food retailers. But the limited access to Bornholm makes foreign products more expensive, and so there is a potential for building a local, self-supplying circuit.

Henning Hervik, experienced agricultural advisor and permaculturist, is currently engaged in establishing such a network. And it is interesting how many advantages and gains may be created for the local producers (*and* consumers), that they couldn't create on their own, if only someone with the sufficient overview puzzles the pieces right together, and makes the right kind of sustainable proposals. – Because no farmer will invest in new experimental production, if he or she can't make a return for the extra produce. (As said by the renowned permaculturist Max Lindegger: If your project is not making a profit, it will be making a loss!).

Another example is the prosperity of several Danish 'box schemes', where local organic vegetable growers have arranged with a number of subscribers, so that the farmer is guaranteed a certain amount of selling, even before seeding the fields. This involves a degree of extra transportation, driving the goods to the consumers, but nevertheless makes a robust basis for long-term, eco-friendly food production.

In some cases, the subscribers are even involved in the farming work themselves. This system has proved itself profitable and durable in several cases, which is quite remarkable considering the Danish food infrastructure, which is dominated by supermarkets selling industrial foods at discount prices. And it can be seen as salient parts of a future bioregional strategy.

Some of the aspects that would bring such initiatives further, involve the enhancement of local plant propagation, decentralised renewable energy production, localised money systems (LETS, etc.), and so on.

The Global Perspective

This whole article has been about localised or regionalised self-supply, seen from a primarily western context. So how can we argue, that this represents a strategy with a global perspective? – We can and we do, from those central permaculture principles that circle around themes like Diversity, Multiplicity, Mosaic Structures, and "Small is Beautiful". One of the vital understandings within permaculture is that sustainable solutions must stem out of and from the local conditions and surroundings of a given place, country or culture. – Conditions, that vary from one region to another, the approach still being based on the same fundamental principles of true sustainability.

In this way, the bioregional strategy becomes a way of describing how *all* local and regional societies in the world may establish a sustainable self-supply system, supplemented by sustainable exchange of goods beyond the regions' borders – from Africa to Asia, from Northern Europe to Latin America...

One of the great challenges now facing the permaculture movement is how to develop strategies for a future global trading system that may still be sustainable from the classic understandings of environmental resource management. If, as an example, in 50 years all sea transport would be driven by wind, it is not entirely impossible to envisage that such a transportation system might be sustainably established... So here's a whole unopened area of developing research available for future permaculturists and environmentalists to develop together...

Some good questions

This year (in September 2009) the three Scandinavian Permaculture associations arranged a small workshop on bioregionalism at their yearly 'Nordic Meeting'. The workshop involved three questions about how to further this promising environmental strategy. The questions are reproduced here below, together with some of the answers. Perhaps you and your friends might find pleasure in spending an evening in good company and a bottle of wine, taking up the challenge of deliberating these questions a little further? (Oops – wherefrom, in our bioregional strategy, shall we produce the wine? ... ☺).

1. What goods, that we won't accept to be without, can only be supplied from outside the local bioregion? (And how may we supply them sustainably?).

Coffee. Tea. Rice. Bananas. Cinnamon. Computers. Medicine. (Electric?) cars. Tarmac. Rubber for bicycle wheels. Plastic. ...

2. What kind of changes in society are necessary for bioregions to be a viable development in a modern industrialised society?

Decentralised capacity of political decision making. Decentralised tax collection. Legalisation of LETS-systems. Converting the energy sector towards decentralised power plants and sustainable energy sources (sun, wind, water, waves, biofuels). Converting the national economy to more part-time jobs (e.g. in agriculture), and fewer jobs in the industrialised export-industries. Repopulation of the countryside.

3. What incitements do you see, that may promote a development of society towards bioregionalism?

Taxing goods, the larger and heavier, the longer the distance of transport. Information about peak oil. Public demand for better (healthier) products. Unemployment. Civil unrest (?). Localising the focus of middle class citizen values, as demonstrated in the Transition Initiatives.

Contacts & references

- www.permakultur-danmark.dk (website of the Danish permaculture association).
- www.permaculture.co.uk (website of the English permaculture association).
- www.permacultureactivist.net (website of the north American permaculture magazine 'Permaculture Activist').
- www.transitiontowns.org
- www.netvibes.com/TTiDK (website of transition initiatives inDenmark).
- Search 'bioregionalism' on the www.
- Permaculture - A Designer's Manual. Bill Mollison. Tagari, 1988.
- Introduction to Permaculture. Bill Mollison. Tagari, 1994.
- The Earth Care Manual. Patrick Whitefield. Permanent Publications, 2004.