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Innovation Potential of Community-Based Sustainability Initiatives - Results from TESS

About the TESS project

TESS (Towards European Societal Sustainability) is a European research project exploring the role of community-based initiatives (CBIs) in creating a sustainable, low-carbon Europe. The project is grounded in a diversity of disciplines, analytical approaches and methods. It brings together natural and social scientists, employs qualitative and quantitative methodologies, and develops tools for understanding the environmental, social, political, economic and innovation impacts of CBIs in the field of sustainability.

In this project CBIs are defined as initiatives aiming to serve the environmental and social sustainability needs and interests of (mostly) place-based communities. They may operate for profit or not. The results presented in this brief draw from a survey of 63 such CBIs in Finland, Germany, Italy, Romania, Scotland, and Spain.

These initiatives work in a wide range of sectors: producing and distributing organic food, recuperating food waste, recycling and reusing materials, promoting sustainable transportation, generating and distributing renewable energy and establishing adequate administrative frameworks or infrastructure in their surroundings.

What is grassroots and social innovation?

Innovation is a key process for transitioning towards a more sustainable economy and society. Unlike more traditional innovation processes, grassroots innovation by CBLs implies 'owning' and embodying innovative sustainable practices and generating socially embedded changes among a plurality of actors. Within the scientific and public debates, CBLs are often regarded as a 'soft' and 'bottom-up' alternatives to major technological changes, as opposed to more top-down and market based solutions. Hereby, they do not only favour single innovations but also seek to translate their innovative effort into a regime shift acting as 'pioneers' of wider changes. In short, CBLs are engaged in both new technological solutions and social innovation, but often emphasize the latter. Social innovation has a participatory and creative nature and can be defined as:

... new solutions (products, services, models, markets, processes etc.) that simultaneously meet a social need (more effectively than existing solutions) and lead to new or improved capabilities and relationships and better use of assets and resources. In other words, social innovations are both good for society and enhance society's capacity to act.

(Caulier-Grice, J. Davies, A. Patrick, R. Norman, W. (2012) Defining Social Innovation. A deliverable of the project: "The theoretical, empirical and policy foundations for building social innovation in Europe" (TEPSIE), European Commission – 7th Framework Programme, Brussels: European Commission, DG Research)

Nevertheless, a relatively small number of studies have investigated how CBLs and grassroots organizations are actively engaged in innovation processes themselves or seek to influence innovation processes from the outside. In this policy brief key findings on the innovative dimensions of CBLs based on the survey among the case studies of the TESS project are presented.

How do CBLs innovate?

The investigated initiatives have found alternatives to the provisioning of a number of goods and services that effectively address environmental concerns and social needs at the same time. This is rooted in a feeling of need or pressure to induce change which is commonly shared among the surveyed CBLs (Figure 1).

The form of innovation that CBLs highlight is strongly related to the social relations, exchanges and the indirect benefits (such as social cohesion) that they create to their members and/or beneficiaries. In other words, the innovation is brought by the "different forms of doing" of CBLs. In fact, the survey shows that CBLs members perceive innovation to be in the processes rather than in the products. In this, CBLs are innovative in terms of their organizational structures: differentiating themselves from the classical for-profit business model, CBLs tend to choose more collaborative forms to organize their activities in more democratic and deliberative ways. At least three different organizational models have been identified: cooperative forms, social enterprises or groups based on non-monetary reciprocity/exchanges. Either autonomous from public institutions, or by collaborating with them, these projects have emerged after the interests and efforts of a number of committed and conscious people: an effective grassroots approach to societal change.

Although it is not their priority, CBLs are also innovative in their use of technologies. Their preferences towards the use of green or "low carbon" technology often make them pathfinders or pioneers of sustainability in an era of increasing ecological consciousness. The use of green technologies is exemplified by the generation of energy from renewable sources, such as the generation of heat from locally produced wood scraps. Forming new markets or market segments is also relatively frequent among CBLs: 38% of the surveyed initiatives created new goods or services which were previously unavailable (boxes E+F in Figure 1). For example, a surveyed cooperative founded

in 1984 was the first group in Spain to successfully offer bicycle courier services as an alternative to conventional logistics. Other key market innovations that initiatives have undertaken are schemes for energy saving, machines that introduce mechanical weeding for replacing herbicides, and new software (e.g. online communication platforms). It can be concluded that overall technological innovations in the context of CBIs tend to emerge in situations when small-scale, local solutions and community empowerment have grown sufficiently.

Remarkably, the majority of the surveyed CBIs do not only make use of the innovations that are introduced by others, but rather creatively re-invent and adapt these for their own purposes, while sharing common practices, especially regarding social innovations. In particular, 42% of the sampled CBIs experimented with innovations introduced by someone else (boxes D+E in Figure 1) and 17% achieved both the formation of a new market and the testing of existing innovations (box E in Figure 1). In turn, the achievements of the innovative efforts of the surveyed CBIs promote their diffusion (27%, box H in Figure 1) or, more rarely, patenting (box I in Figure 1). In addition, in their innovative efforts, CBIs frequently engage in different collaborations (35%, box G in Figure 1) and the majority aim to diffuse their knowledge to a wider audience: some sort of training or educational opportunity is provided by 52% of initiatives (boxes B+C in Figure 1), while 17% are intensively active in this respect (box B in Figure 1).

These results indicate that CBIs have both the right incentives and adequate instruments at hand for creating and diffusing both social and market innovation. This contribution is, however, conditioned upon the solution of some practical and substantial problems. One example is the availability of “space”, in various forms and formats, which is fundamental for many types of CBIs for developing their innovative capacity. This is exemplified by initiatives that are converting a “brownfield” land into urban gardens to experiment with new forms of food production and consumption, or CBIs using low-cost (unused or token rent) buildings and/or land for establishing their social or economic practices and sustainability projects.

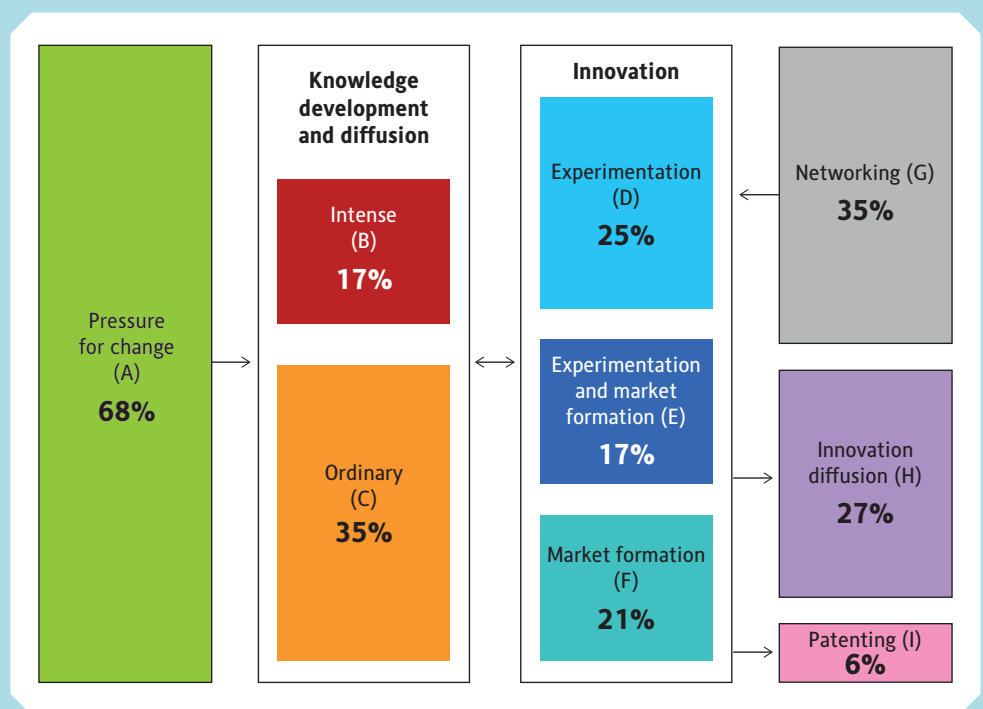


Figure 1: Number of CBIs (% of total CBIs surveyed) engaging in different sub-functions of the innovation process. Pressure for change is a trigger, while knowledge diffusion and networking are instrumental to either create new markets/products or experimenting existing innovations, which may be imitated by others, and be patented. Innovation sub-functions are not mutually exclusive.

TESS results show an important link between technology/market improvements and socio-political change: technologies related to energy or to transportation can have far-reaching effects on social and political organization if communities are prepared to tackle the barriers that hinder decentralization of management and control of such technologies. An example of the relation of innovation with political change comes from an Italian NGO which has patented a material made of recycled plastic and paper. Refugees collect trashed materials and transform these into bags, wallets, cups, etc. made of innovative materials. At the same time, this initiatives support refugees in improving their working capacity, skills and in their social and economic integration.

Can we rely on CBLs' innovation potential? It's time to move beyond!

Although the benefits that CBLs bring to society are significant, relying on volunteer work and community engagement to meet social needs is challenging. In other words, the social innovation performed by CBLs has certain limitations. For example, in relation to environmental justice, often a key social aim for grassroots initiatives, TESS results show that CBLs have difficulties in drawing in participants from a wide social and cultural spectrum of society. This limits their impact in reaching all economic classes. On the other hand, these groups, either professionalized or not, experience institutional or bureaucratic barriers. In some cases the initially ambitious social, political and environmental objectives need to be significantly reduced because the organizations are struggling with economic survival and bureaucratic burdens. CBLs are often small and informal organizations. However, in many cases they still need to fulfil administrative requirements, which hinder their development. In other words, CBLs innovative potential might be stifled by factors such as burnout (workload concentrated on a few people), the need to obtain support from other institutions, including public authorities, or pressures to adopt more managerial and for-profit organizational models.

Certainly, the fact that innovation tends to benefit only particular groups and that innovation is dependent on the commitment of a small group of citizens could retain current socio-environmental injustices. The work of public authorities is therefore invaluable when it comes to expanding the access to sustainability practices and services to the entire society. Stricter social and environmental regulations, the establishment of policy environments characterized by transparency, accountability, coherence among different political and institutional bodies, among laws and regulations, as well as simplified procedures and bureaucracy is found to benefit CBLs working on transitions to sustainability.

If these internal and external challenges will be solved, CBLs would not only be niches of alternative social practices, but capable of contributing substantially to a European-wide transition towards sustainable economic growth.



Where do you find more information?

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