

The importance of bio-innovators for an emerging bioeconomy strategy: A Romanian good practice

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In the concrete case of efforts for building green skills, in order to integrate SDGs in local / regional economic activities, the boundary between good practices and bio-innovators is quite sensitive. If good practices have already become a concept / term or even a method of achieving goals, bio-innovators could be considered an example of good practice. This is because bio-innovators are the ones who make their mark on the local level on small-scale bioeconomic activities (initially), so that in a natural process of evolution, to reach the leap: “If you start me up, I'll never stop”¹. In other words, bio-innovators are the economic actors that foreshadow the development trends of the bioeconomy at local / regional level.

The **objective** of this paper is to reveal the importance bio-innovators have in designing the roadmap for the development of a regional bioeconomy strategy. The approach adopted is that introduced by the project ‘Bio-based strategies and roadmaps for enhanced rural and regional development in the EU’ (BE-Rural). A broad stakeholder consultation process is used, with the aim of promoting, supporting and further developing regional bioeconomies. The experience of the analyzed pilot areas demonstrates the need to identify good practices and to replicate them by interested economic actors in other areas.

The **contribution** of the paper to this special session’s topic refers to documenting the influence / complex role attributed to the local “Players” (bio-innovators), who managed in an inspired way to weave the tradition of certain activities with innovative elements. What is noteworthy is the fact that these daring “Players” found support in the associative entities - cluster type - existing in the respective fields in the analyzed area (see Table 1), namely Covasna County - the cradle of the economic clustering process in Romania.

Covasna County is one of the top Romanian promoters of bio-based industries and has been involved in many related EU projects. The bioeconomic potential of Covasna County lies in its biomass resources and its dense stakeholder network, consisting of business incubators and clusters. It also benefits from the decade long action of three Local Action Groups (LAGs). It has a strong cultural identity still tributary to local traditions, which are carefully cultivated: thermal baths, mofettes (an opening in a region of nearly extinct volcanic activity, through which carbon dioxide, nitrogen, and other gases pass) and traditional crafts. Covasna has a considerable potential for the development of bio-circular economy based on its economic structure: all primary production sectors (agriculture, forestry, fisheries, and aquaculture) are well represented in the

¹ PANORAMA SUMMER 2019 / No. 69, Focusing on European Regional and Urban Policy, p. 16

local economy, as are green energy, livestock farming, woodworking and furniture, textiles, clothing and knitwear, food processing (meat and milk) and tourism².

Table 1 Covasna's innovative bio-products organized as thematic clusters

| CLUSTER | BIO-INNOVATOR | PRODUCT/SERVICE |
|---|--|---|
| TRANSYLVANIA TEXTILE & FASHION CLUSTER | RE-TEXT STUDIO | Reuse, recycle of waste and textile materials |
| | DESIGNER | Reuse, recomposition of waste and textile materials |
| | Underwater Research Centre Association | Special therapist |
| PRO WOOD REGIONAL WOOD INDUSTRY CLUSTER | WIEB TOYS | Interactive and educational toys |
| | SPIRALWOOD | Spiral type twist elements |
| | AUTHENTIQ SPACE | Ecological solid wood furniture |
| | MONDOIMPEX | Acacia wood garden furniture |
| | WILD HOMES | Natural resource houses |
| GREEN ENERGY INNOVATIVE BIOMASS CLUSTER | BIOMASS NRG | Energy sustainable communities |
| | | Biomass |
| REGIONAL BALNEOLOGICAL TOURISM CLUSTER | WEGA INVEST | Bottling of ferruginous mineral water under inert atmosphere-controlled gas |
| | ORVELL | Therapeutic mineral water |
| AGRO FOOD REGIONAL INNOVATIVE CLUSTER | MEOTIS | Revolve – high zero protein drink |
| | WEGA INVEST | Fibro+ Gluten-free mineralized tonic drink |
| | CHANGE CENTER | Lifestyle: food and movement. Health centre |

Source: Roadmap for a Bioeconomy Strategy in Covasna County, Table 2, p. 28

² BE-Rural, Deliverable 5.3. 'Regional strategy and roadmap documents', p. 25

Moreover, Covasna County and the adjacent areas can be assimilated to “living labs” that indicate the areas of regional specialization and implicitly those that justify the support of local / regional authorities (which is found in the Smart Specialization Strategy of the Centru Region).

The adopted **method** is a combination of qualitative and quantitative analyses carried out for this paper involving a mix of means / elements: defining the topic, identification of subjects, distribution of questionnaires according to the exact field of their activity, processing their answers, the conceptualization of the economic phenomena found in the investigated local economic practice, and the drawing up of small-scale business models dependent on bioeconomic activities. Given the diversity of the necessary data (e.g. field of activity of relevant economic actors, portfolio of activities, previously validated initiatives) we proceeded to organize (for a period of about 2 years) informative, educational and exploratory events with local / regional representatives of the business environment, academia, local / regional authorities and civil society. The involvement of all categories of local actors allowed to obtain a complete picture of the local economic climate, but also of the perspectives from the point of view of reaching the SDGs in the studied pilot area.

The development process of the bioeconomy roadmap was based on a participatory approach relying on the involvement of the local/regional stakeholders³. The process was initiated with a workshop organized in the context of an international conference on bioeconomy as a driver for green, sustainable, and inclusive growth. The format chosen was that of a brainstorming game about the specific topics of bioeconomy in an interactive meeting using an online communication platform facilitating the sharing of knowledge and expertise on best practices in different EU region’s bioeconomies. The aim was to collect ideas and to exchange knowledge among European regions in order to facilitate the elaboration of regional bioeconomy roadmaps or strategies. The net result for Covasna was defining the local long-term objectives: new value chains and access to new markets; circular economy; multidimensional resilience of the human society; food security and achieving 100% biotechnology until 2050.

After the workshop, several Stakeholder Working Group (SWG) meetings were organized in order to elaborate the logical matrix. The logical matrix is the auxiliary tool used in Covasna’s process of developing the roadmap strategic documents. When the necessary inputs were completed, a synthetic picture of Covasna County with respect to objectives, reference period, indicators, references and prerequisites was obtained. The participants of the SWG meetings were asked to cast three votes for the most important and impactful elements of the matrix, mentioned above. After processing the vote, the inputs necessary to complete the logical matrix were obtained. Further, were formulated the general objective (Qualitative and sustainable way of living in the region), strategic objectives (Harmonious Rural Development; Socially Responsible Region; Competitive advantage by eco-innovation), operational objectives (Develop Bioeconomy Business Models, Support education and cooperation culture for the implementation of regional bioeconomy processes), activities, outputs, outcomes, assessment of risks and monitoring measures. In parallel to the peer review workshops, other events such as knowledge and capacity-building seminars and educational events were organized as part of BE-Rural project, which contributed to the substantiation of the bioeconomy roadmap.

³ BE-Rural, Deliverable D5.3. ‘Regional strategy and roadmap documents’ p. 34-38

Covasna County's bioeconomy roadmap was **the result** of combining the outcome of the logical matrix with the current situation of the circular bioeconomy in the county. It outlines the action plan for the achievement of the goals as well as the monitoring and governance. More than eighty stakeholders participated in the meetings and contributed to the development of the regional bioeconomy roadmap, while almost two hundred regional stakeholders participated in the wider activities which framed the roadmap development process, such as capacity-building seminars and business model development activities.

The processing of this cumbersome information collected during the implementation of the BE-Rural project generated the most important **output** of the project, the document "Roadmap for a bioeconomy strategy in Covasna County".

This research brings forth the fact that many of the bio-innovators even that they might not have a long activity, they do manage to impose themselves on the local market and to draw the attention of the regional authorities or of the strong companies on the potential they represent. If local / regional authorities have supported bio-innovators through specific programs, the local business community - through the Association of Small- and Medium Size Enterprises of Covasna County ASIMCOV has attracted them in mentoring programs (Interreg Accelerator) or financing start-ups companies. This is the most important **conclusion** of this research: a competitive framework combined with inter-human and institutional solidarity, based on common values and a common vision of the potential of local bioeconomy allows Covasna County to represent the case of a nodal involvement of bio-innovators in the local economy.