

CHALLENGES, OPPORTUNITIES AND NEEDS FOR A SUSTAINABLE BIOECONOMY IN THE ALENTEJO REGION

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- The Portuguese region of Alentejo was one of the first to explore how support for the Entrepreneurial Discovery Process (EDP) can go digital during the challenging times of the COVID-19 pandemic
- 47 stakeholders participated in the online event, staggered over two half-days, to discuss challenges, opportunities and needs of the region in the field of sustainable bioeconomy
- **Inadequate framework conditions** (legal and infrastructures) and **disarticulation between skills needs and education/training available** were highlighted as some of the barriers to innovation
- Greater **articulation between the different actors in the value chain** and a more **integrated/systemic approach** are some of the identified needs of the market

This JRC policy insight presents the main findings of an online event that took place on June 24 and 30, organised by the Regional Coordination and Development Commission (CCDR) of Alentejo, Portugal, and the JRC. The workshop aimed to support the Entrepreneurial Discovery Process (EDP), a key feature of Smart Specialisation (Foray *et al.* 2009), in the field of sustainable bioeconomy. The objective was to stimulate entrepreneurs to share experience, identify obstacles, and suggest solutions to strengthen the innovative capacity of the region. It brought together a range of actors in the territory, from business, research, and the public administration to discuss issues relevant to the region of Alentejo. A physical event foreseen for March 2020 was replaced by an online workshop due to mobility restrictions and sanitary measures (social distancing), as a result of the COVID-19 pandemic.

1. State of play

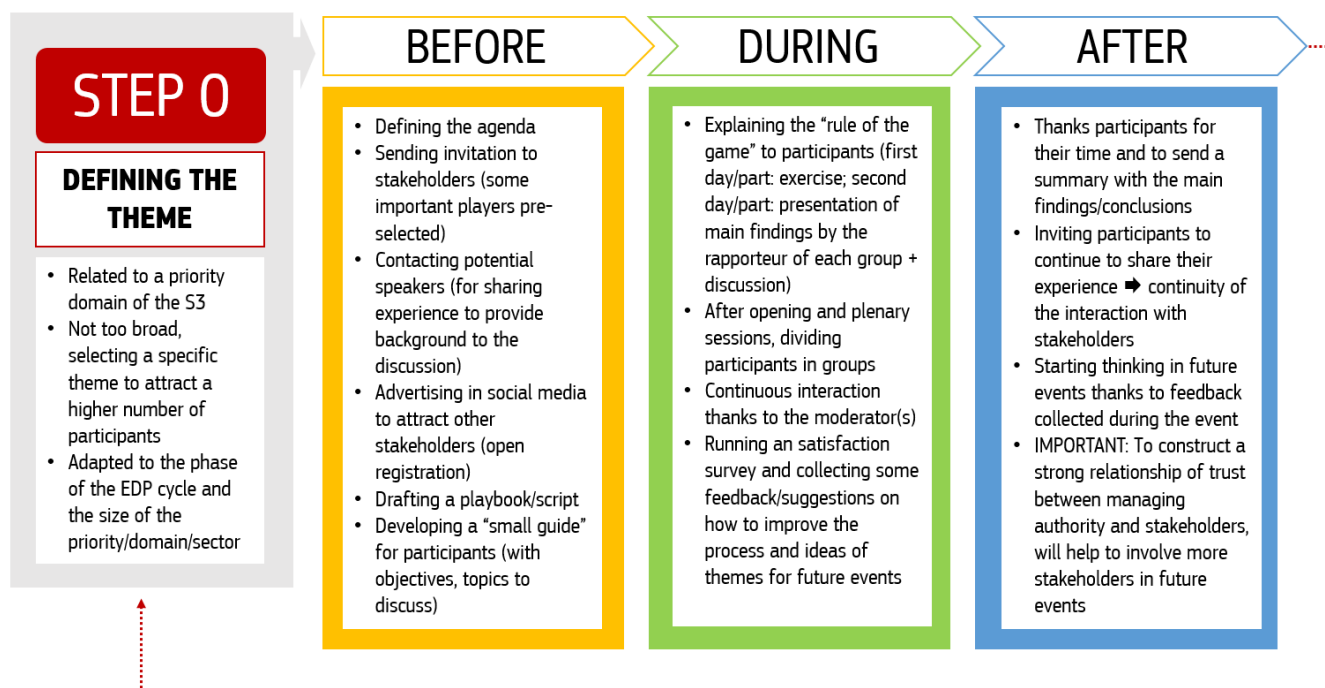
Alentejo is the largest NUTS 2 level region in Portugal but has the lowest population density and the highest rate of ageing (INE, 2020). The primary sector (agriculture, farming, hunting and forestry) accounts for 20% of total employment, followed by manufacturing, which is responsible for 19% of jobs (INE, 2020). Innovation performance has improved over recent years, but the region is still considered a moderate innovator under the Regional Innovation Scoreboard (EC, 2019).

In its Smart Specialisation Strategy (S3) for the programming period 2021-2027, the region has prioritised five vertical themes (**Bioeconomy**; Energy and Mobility; Tourism Services; Creative and Cultural Industries; Social Innovation and Citizenship) and two transversal enablers (Digitalisation and **Sustainability**).

Bioeconomy in Alentejo includes essentially: Agriculture and Livestock; Forestry; Fishing and aquaculture; Food and beverage manufacturing; and Wood and cork manufacturing (Fialho, 2020). The sector contributes 27% of total employment and 23% of regional value added (idem, 2020). Although, natural resources available in the region are an opportunity and the basis for a strong competitive advantages (Neves, 2020), the sector faces several challenges regarding waste management and by-product valorisation (Fialho, 2020), namely in the light of the new European Commission priorities under the European Green Deal (Neves, 2020).



Methodological approach under the 'Entrepreneurial Discovery Process' workshop



2. Workshop Findings

2.1. Challenges, bottlenecks and obstacles

- › Difficulties in waste and by-product recycling and transformation due to high costs and legal framework
- › Challenges in accessing funding and markets (especially for smaller companies)
- › Low levels of cooperation between large and small-sized companies
- › Negative climate change effects on water quality and quantity, impacting production quantity and quality
- › Low profitability in the short term due to costs and the lower productivity levels of a more eco-friendly production system. Investments may be not viable in the short term
- › Lack of human resources with the right skills for bioeconomy (disarticulation between demand and supply sides)
- › Weak telecommunications coverage in low population density areas (issue for digitalisation)
- › Low levels of cooperation between the private sector and higher education / research centres

- › Heavy bureaucracy and long waiting times when applying for public funding, which may lead to loss of competitive advantage

2.2. Opportunities

- › Articulation of agro-food industry with the tourism sector in a win-win strategy: The tourism sector may benefit from the image/reputation of agro-food brands or products (e.g. wine and olive oil) and from the creation of niche products (e.g. eno-tourism and olivo-tourism). In turn, the tourism sector can also help to promote local agro-food products when they are included in its tourism eco-system (suppliers of accommodation services)
- › Availability of waste and by-products to be transformed into other products or into energy
- › Availability of natural resources and primary products with a high potential to be used by different segments of the manufacturing industry (e.g. algae can be transformed into pharmaceutical products, fertilizers, and energy)

2.3 Needs and solutions

- › Enlarging the sustainability concept to the value chain: Not only does production need to be more sustainable, but also inputs, distribution and commercialisation
- › Easier access to sustainable inputs/products: availability of more eco-friendly products at a lower cost
- › Better dissemination and communication (marketing strategy) of the need to adopt eco-friendly production systems with the aim to develop a “sustainable culture” among entrepreneurs and citizens
- › Stronger networking and cooperation is needed between competitors in the market and along the value chain (e.g. more incubators and fostering of partnerships)
- › Adding value to primary products through their transformation
- › More efficient and rational use of the land and limited natural resources
- › More tailor-made and targeted support for smaller companies

3. Event evaluation and feedback

- › Over the two half-days event 47 stakeholders participated in the EDP workshop; some of them only for one of the days
- › The overall satisfaction of participants in the EDP workshop was 4.2 out of 5 (Figure 1)
- › 54% revealed preferences for mixed events (online and in person) for future similar workshops (Figure 2)
- › Post-COVID-19 economic recovery (41%) and digitalisation (21%) are the two themes most voted for future EDP workshops (Figure 3)

Figure 1. Overall satisfaction about the EDP workshop

Note: Number of respondents = 30

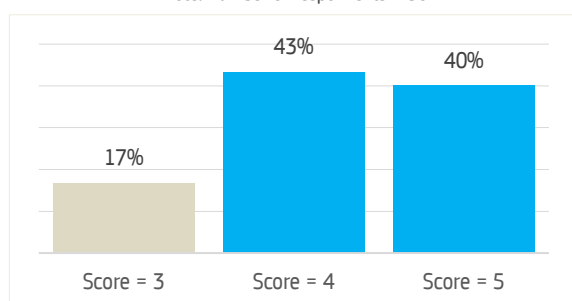


Figure 2. Format preferences for future EDP workshops

Number of respondents=28

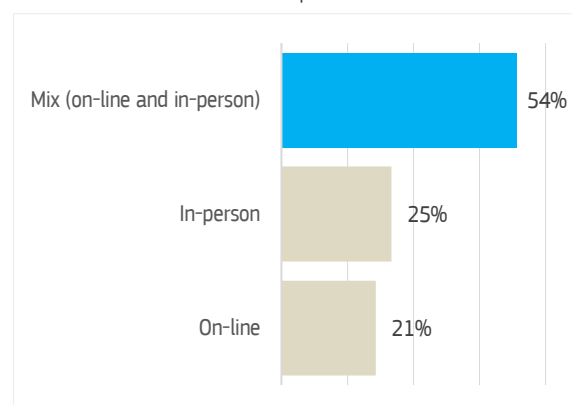
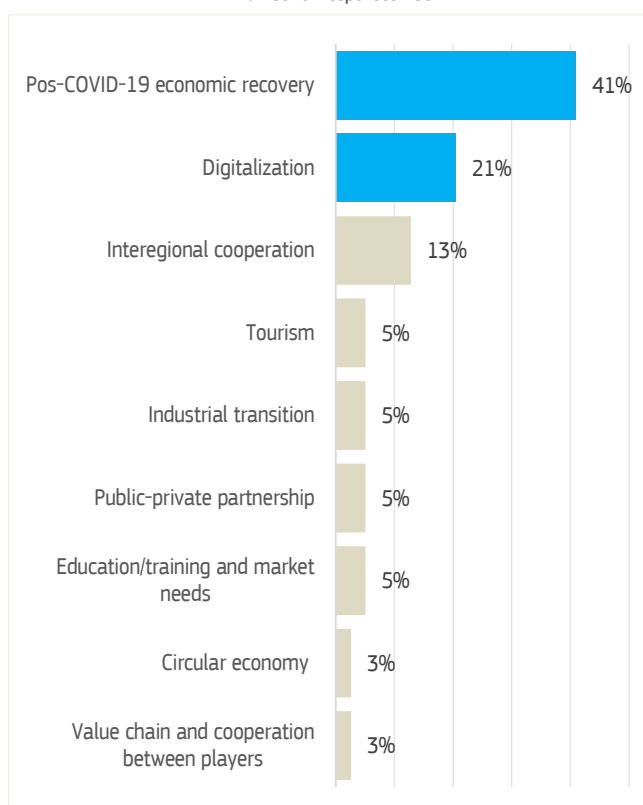


Figure 3. Themes for future EDP workshops

Number of responses =39





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4. Some reflections

The pilot workshop in Alentejo and the advantages of digitalisation shows how the EDP can be continued and improved, even in difficult circumstances. EDP events organised by regional authorities should have the objective of creating the space or fora for further discussions and discovery among innovation actors.

Digitalisation of the EDP allows for more regular interactions, even if it lacks the 'human touch' of meeting physically. Many EDP workshops fail to ensure follow up after the event, but this was avoided in the case of the online workshops in Alentejo. It also allows for a potentially more inclusive process as people can join online events from wherever they are based; a particular advantage for large and remote regions such as Alentejo. As we enter the 'new normal', which although is still far from clear, the EDP can surely be improved and strengthened by experimenting with and building on new opportunities in the digital world.



5. References

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