THE CLIMATE RESILIENCE CLUSTER

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Climate resilience through social innovation: the relevance of stakeholder engagement

The events associated with climate change are increasing year by year. If we can watch newscasts on TV or read digital newspapers, we can realize the dramatic consequences of climate change. If we have a look at the primary sector, these events have important impacts on agriculture, fisheries or forestry in the form of floods, fires or droughts. For instance, about 90 per cent of those disasters are weather-water-related, and they affect society, environment and regional economies; they cause injuries, displacements or deaths, but also influence the regional economy and the natural environment, e.g., the recent floods in Valencia or India.

These scenarios associated with climate change raise new challenges for societies (IPCC, 2022), and they require new perspectives to deal with new circumstances, in many cases, never seen before. Thus, climate change adaptation policies should go hand in hand with sustainable development practices in the productive industries associated with land and water seeking to create climate-resilient territories. It demands a multiple-viewpoint approach through the involvement of stakeholders to achieve an integral focus on the problem, and to develop smart socio-economic models able to adapt to new circumstances while maintaining the natural environment (Beretic et al., 2024). The interdisciplinarity of novel solutions is a must to adapt societies to new climate circumstances (Wamsler et al., 2021).

However, this approach is easy to plan, but difficult to apply as it needs adopting a top-down and bottom-up collaborative approach (Dzebo et al., 2019), where both policymakers and users can share their views and problems and find common spaces for co-creation processes through case studies or small-scale pilots. It is an exercise of social innovation, that should create solutions to face new realities, through an evidence-based policy generation toward environmental adaptation (Müller et al., 2021). Here is where the Mission: Adaptation to Climate Change tries to make its contribution, supporting at least 150 European regions and communities to become climate resilient by 2030.

It is an ambitious challenge, but basic for people, profit and planet. In this context is where the Farclimate project intends to contribute; through an exercise of social innovation, following participatory approaches, applying Living Lab methodologies, to deploy nature-based solutions. This project is mainly based on developing climate-resilient regions in terms of agriculture, forestry and fisheries, which are basic from the environmental perspective, but also from the social and economic ones.

In this regard, attending to the huge challenges explained before is a preliminary step to adapting regions and production systems to new climatic realities. This should necessarily start through a value-based approach where the different stakeholders participating should feel comfortable and perceive their involvement as rewarding.

For this objective, it is recommended to follow the philosophical principles of social exchanges to deal with stakeholders, that is, to understand:

- The ontology, or who is who in the region, either humans or organizations, e.g., from Society, Science, Innovation, Industry, and Market
- The axiology, identifying and clarifying the interests (coincident or contrary) in the region, e.g., ecological, productive, leisure, cultural, societal, among others
- The epistemology, or the understanding of the capabilities every stakeholder has or the expertise and knowledge they possess, e.g., environmental conditions, ecological characteristics, physical parameters, socio-economic perspectives…
- The deixology, through the identification of risks and opportunities associated with the different worldviews the stakeholders have, e.g., fishermen and farmers, transformation industry, citizen, civil servants…
- The praxeology, or the definition of actions to be taken in the medium and long-term from each participant, e.g., good and bad practices in the area or beyond.

This wide approach produces a picture of what is happening; that is, we can have different pieces of a mosaic, and we should be able to create the best figure with the highest qualified consensus possible. Furthermore, this mosaic can benefit from experiences in other regions. Still, it should be prepared ad-hoc to the very specific realities each region has due to the differences among stakeholders or governance mechanisms.

How should public administration or projects support all of this? Through awareness-raising, training, small-scale pilot experiences, mentoring and networking activities. All these efforts should be updated continuously, identifying emerging competences that should be developed. These competences can be more effectively addressed through social innovation activities, making it possible to create societies more resilient against climate change.

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