

OTECCA, a territorial observatory to foster citizen science on socio-ecological transition

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The release of the Working Group III contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change in April 2022, dealing with the mitigation of climate change, highlights a recent strand of the academic literature dealing with "the growing role of non-state and sub- national actors including cities, businesses, Indigenous Peoples, citizens including local communities and youth, transnational initiatives, and public-private entities in the global effort to address climate change" (IPCC 2022). For the keen observer of the climate change issue, this literature is reminiscent of a prescient article by Elinor Ostrom written in 2009 for the World Bank, in which the author argued that single policies adopted only at national and international scales are unlikely to cope with climate change. For the author, "a polycentric approach at various levels with active oversight of local, regional, and national stakeholders" is necessary. This approach would encourage effort at multiple levels and develop methods adapted to local realities and would therefore form an indispensable complement to national and international policy initiatives. The interaction of different stakeholders at different decision-making levels (e.g., from local to national) would build the necessary trust to forge a collective response to climate change.

The scientific community must be a stakeholder in this interaction. It is a question not only of society's trust in its researchers, but also of the need for scientists to answer society's questions on the complex issue of how to deal with climate change, of necessary behavioural changes, etc. However, science with society is not a highly developed practice. It can only fully emerge if it is institutionally accompanied. Various institutional forms have thus been developed: science shops, collaborative observatories, etc. These frameworks allow representatives of society such as associations or local authorities to exchange with scientists, co-construct research projects, or be involved in data collection. Since the issues raised are interdisciplinary in essence, these institutional forms must be capable not only of organising the interaction between science and society, but also the collaboration between different disciplines in this interaction.

In this framework, the idea of implementing such an institutional structure in the Alpes-Maritimes area emerged in 2018 during an event co-organised by Université Côte d'Azur (Maison des Sciences de l'Homme et de la Société Sud-Est, MSHS Sud-Est) and the association Synergie de la

Transition 06 (named "Assises de la Transition Écologique et Citoyenne Alpes-Maritimes et Alpes du Sud", autumn 2018). In 2020, Université Côte d'Azur set up the structure within the Maison des Sciences de l'Homme et de la Société Sud-Est, with the creation of the Observatoire de la Transition Écologique et Citoyenne Côte d'Azur (OTECCA), observatory for socio-ecological transition on the Côte d'Azur, composed of researchers, association representatives and student organisation representatives.
OTECCA aims to interface with scientific as well as civil communities in order to gather, produce and share knowledge of socio-ecological transition in the Alpes-Maritimes territory and to increase citizens, decision makers and other stakeholders' actions through better collaboration. It addresses a wide range of themes stretching from agriculture, consumption, and culture, to energy, economy, education, environment, food, health, housing, solidarity, transports, etc.

OTECCA pursues three missions:

Document and analyse the territory from the angle of ecological and civic transition
OTECCA gathers, organises and produces multi-sector data on socio-ecological transition available to researchers and the general public. The goal is to provide information on the current state of play in the Alpes-Maritimes territory for analyses of vulnerabilities, potential, and future developments.

Implement and promote collaborative science-society research
OTECCA strives to connect scientists and researchers with civil society stakeholders in order to implement projects built hand-in-hand on the territory. While research needs on environmental as well as civic transition can emerge from both researchers and civil society stakeholders, OTECCA finds the right partners and brings into existence a collaboration between stakeholders in order to build and carry out a research-based project. The social utility of research is thus strengthened. The collaboration also contributes to scientific innovation with new research questions emerging from society's day-to-day realities.

Foster and spread scientific culture as well as citizen science
OTECCA strives to foster interactions between scientific and civil communities in order to develop knowledge sharing as well as good practices in analyses and actions. To do so, OTECCA positions itself as a means for scientific mediation through a variety of actions such as collaborative projects, conferences, seminars, training, or workshops.
Since its creation, OTECCA has facilitated several projects. As an example, in November 2020 OTECCA initiated a research project built hand-in-hand with "Les Petits Loups Maraîchers" (PLM) association in order to question the suitability, relevance and future of the association model from agricultural, energetic, economic, social and political perspectives. PLM is based in Bar-sur-Loup (Alpes-Maritimes area) and it develops a collective approach to produce organic local food on three different plots. The multidisciplinary approach needed for the questions that emerged specifically engaged OTECCA in the research project. The research has led to

several student group projects and internships within Université Côte d'Azur (UCA) and its related partners, in energy and technology, political science and psychology. As an example, in a six-month internship, a student in social psychology worked on understanding the values of the PLM association members and factors impacting on their commitment to the organisation and on the adoption of eco-responsible behaviour. Not only did the study allow the association to better adapt to the needs and motivations of its members, it also brought to light unexpected and interesting results in terms of behavioural psychology.

The Scientific Advisory Board of OTECCA truly considers that a reflection on science with society to foster initiatives in socio-ecological transition can be undertaken during climate conferences and other international meetings. There are at least two ways of doing so.

The first one considers how to organise science with society at a local level. It deals with discussing the institutional form that allows the exchange and co-construction of interdisciplinary projects with representatives of society on climate change mitigation or adaptation. How can the meeting of citizens and scientists be organised? How to build mutual understanding between scientists and non-scientists? How to integrate citizens' expertise in the research procedure? How to ensure the independence of the scientist with regard to political objectives? etc.

The second way of approaching the issue of science with society that OTECCA could implement consists in taking advantage of experience gained on successful projects. This feedback would enable a larger audience to grasp the challenges encountered in concrete locally-developed projects and the solutions found in terms of changing practices and behaviours. This feedback will also highlight local success factors that can be replicated or adapted to other contexts. As an example, one of the results of the study carried out by two students of Political Science on the association "Les Petits Loups Maraîchers" (PLM) was to highlight the conditions, both social and political, which enabled its emergence on a local level and which should be met for this associative model to be replicated elsewhere. Additionally, through "Transition and Territorial Resilience: the case of Mouans-Sartoux" (RESET project), a group of researchers from OTECCA analyse from a multidisciplinary perspective how pioneering public policies of sustainable development were put in place in this municipality on the Côte d'Azur as early as the 1970s and their effects in terms of territorial resilience.

As a conclusion, while climate change is a global phenomenon, responses and solutions must be polycentric. The Observatoire de la Transition Ecologique et Citoyenne Côte d'Azur (OTECCA) constitutes a rich opportunity for stakeholders in the ecosystem of the Alpes-Maritimes area to join forces, and contributes to bring together a research community in socio-ecological transition stakes. Thus, it is a stepping stone for social as well as scientific innovation and a contribution for collective action to the fight against climate change.

References

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