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Isabella DE MEO*[1], Ecaterina Nicoleta APOSTOL[2], Mika KALLIO[3], Sonia MARONGIU[4], Nicolae Ovidiu BADEA[2,6], Alessandro PALETTO[5]

SCIENTIFIC CAFÉ AS A TOOL TO INVOLVE CIVIL SOCIETY IN THE FORESTRY SECTOR: A METHODOLOGICAL APPROACH

SUMMARY

In recent decades, the social demand for the involvement of civil society in decision-making processes on environmental issues has been growing worldwide. Among the techniques for involving civil society, the Scientific Cafés are new and flexible tools aimed at ensuring effective communication between scientists, practitioners, civil society, and decision-makers on scientific topics in an informal and inclusive way. From 2004 to today, the Scientific Cafés are increasingly spreading in several scientific fields including forestry. The aim of this article is to analyze the state-of-the-art of Scientific Cafés at an international level and to propose a novel procedure for organizing Scientific Cafés to be adopted in the forestry sector. The literature review show that the first publication on "science cafés" dates back to 2004, while 73 peer-reviewed articles have been published to date (on average just under four articles per year). These publications consider the Scientific Cafés in four senses: science education; science communication; public engagement; and cultural investigation of science. The present study describes the approach followed in a public engagement activity carried out in the framework of ForestValue2 (Horizon Europe project). The approach is developed in five

[1]Isabella De Meo (isabella.demeo@crea.gov.it), Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria (CREA), Research Centre for Agriculture and Environment, via Lanciola 12/A, 50125 Firenze, ITALY;

[2]Ecaterina Nicoleta Apostol, Nicolae Ovidiu Badea, Forestry Research and Development Institute (INCDS) "Marin Drăcea", Blvd. Eroilor No. 128, Voluntari, 077190 Ilfov, ROMANIA;

[3]Mika Kallio, Ministry of Agriculture and Forestry of Finland (MMM), FINLAND;

[4]Sonia Marongiu, Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria (CREA), Research Centre for Agricultural Policies and Bioeconomy, Via dell'Università 14, 35020, Legnaro (PD), ITALY;

[5]Alessandro Paletto, Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria (CREA), Research Centre for Forestry and Wood, p.za Nicolini 1, 38123 Trento, ITALY;

[6]Nicolae Ovidiu Badea, Faculty of Silviculture and Forest Engineering, Transilvania University of Brasov, ROMANIA

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steps: i) identification of the scientific topics; ii) selection of the audience (general public or a specific target group of stakeholders); iii) Scientific Café organization (in person or virtually); iv) definition of the participatory technique; and v) definition of the outcomes. Finally, the approach is based on a few key aspects that create a successful Scientific Café: informality and accessibility of the events as well as a friendly, inclusive, and non-competitive environment.

Keywords: Public participation; transdisciplinary research; citizens' engagement; Café support group

INTRODUCTION

In the post-modern society, non-material values – e.g., social, cultural, and spiritual values – have assumed increasing importance compared to material values – e.g., raw materials and other tangible products – related to nature (Bhagwat, 2009). This transformation in the scale of individual values is society's response to the environmental and socio-economic changes that have occurred over the last 50 years (Slimak and Dietz 2006). In this context of change, the intrinsic value of nature finds a prominent role in scientific debate (Ansink *et al.* 2008) as-well-as the involvement of stakeholders and local communities in the decision-making process of natural resources management (Grumbine, 1994). At the same time, there has been a growing social demand for transparency and public participation in policy choices.

Thanks to an increased awareness among citizens of their rights and among decision makers of the need for a greater inclusiveness of all social actors, public participation in natural resource management is beginning to spread widely in all advanced-economy countries (Paletto *et al.* 2015a).

At political level, the UN Conference on Environment and Development held in Rio de Janeiro (1992) evidences the importance to involve the civil society in the decision-making process related to the management of natural resources by following the principles of public participation (Kant and Lee 2004). The Aarhus Convention, signed in 1998, empowered the role of citizens and civil society organizations in environmental matters and stated that the environmental rights are fundamental to involve citizens in policy issues. In particular, the Convention "on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters" stresses the importance of giving the opportunity for citizens to access environmental information favouring bottom-up processes (Paletto *et al*. 2012).

In this framework, one of the main concerns in involving civil society and stakeholders in decision-making processes are the gaps among scientists, civil society, stakeholders and decision makers (Ádám *et al.* 2015). These gaps are due to many reasons. One is the complexity of scientific language, which contributes to increase the breaks between scientist, civil society, and decision-makers. In certain contexts, the orientation to the present of politicians, the scientists' fair of political abuses of politicians, the stakeholders thinking more concentrated on their needs than on requirements based on ethics or concepts make difficult the interactions and the participative approaches (Elzinga, 2008; Kiteme and Wiesmann 2008). To solve these problems, we need to come up with

methodswhich enable participatory deliberation and transdisciplinary research, yielding practical science-based outcomes (Angelstam *et al.* 2013; Hirsch Hadorn *et al.* 2008).

In the forestry sector, the involvement of social society can take place in different ways and with various procedures depending on the objectives to be achieved through the participatory process (Paletto *et al.* 2022). Participation can be characterized by different degrees of inclusiveness, from the simple sharing of information until empowerment in which social actors are part of the group of decision makers (Jones *et al.* 2000; Tabbush, 2004). In this sense, public participation in forestry sector should be seen as an opportunity to promote the social sustainability of decisions and strategies (European Commission, 2003).

Once the level of participation is established, there are different methodologies that can be used in the participatory process, based on the utilization of different techniques (Lecomte *et al.* 2005). The selection of a particular method or technique cannot be decided a priori but is a context-based choice, deeply related to the objectives of the specific process. Furthermore, the same method can be applied at different level of participation, to support and promote the development of the decision process.

Within this framework can be placed "Scientific Cafés" or "Scientific Aperitifs" – also known as Cafés o Apéritifs Scientifique in French-speaking countries. These events refer to the public discussion of socially pertinent questions and needs which have scientific content in an informal setting and are instruments to ensure effective and well-structured communication between scientists, practitioners, civil society, and decision-makers (Nesseth *et al.* 2021). Scientific Café are events in which the involvement of civil society is more engaging respect to purely informative events. Like hackathons and scenario workshops, in these events the common visitors asked scientific questions and tried to answer them with the help of scientists (Krüger *et al.* 2020). One of the first examples of events aimed at bridging the gap between civil society, scientists and politicians have been the citizen consensus conferences organized in Denmark. In these conferences the process took a few weeks, starting with a question posed to few participants around an issue of present research (Jensen, 2005).

In particular, Scientific Cafés are live forum events that host conversations about current science topics (Bazilio *et al.* 2016; Dijkstra, 2017). It can be considered informal occasions for general public – or a specific target group (e.g., high school students, university students, stakeholders of a sector) – to meet scientist, like researchers and experts, and to discuss scientific topics as-well-as ongoing and future projects. These forums are usually external of the academic environments and are appreciated by horizontality and recognition of knowledge and practices, multiple representativeness, and facility of interaction between panelists and audience (França *et al.* 2016). As emphasized by Dijkstra (2017), scientific cafés can have an influence in breaking down barriers to citizen participation as citizens increased their beliefs that they are able to participate meaningfully in techno-scientific issues.

In international literature, the first publication on "science cafés" dates back to 2004 (Adams, 2004), while to date there are 73 peer-review publications

according to the Scopus database (https://www.scopus.com). The scientific literature considers Scientific Cafés in four different senses (Dallas, 2006): (i) science education, (ii) science communication, (iii) public engagement, (iv) cultural investigation of science. In public participation processes developed in the framework of forest sector, Scientific Cafés are set up as tools to connect civil society and scientist in a participatory and interactive way.

At the light of these considerations, the main objective of the present article is to show a novel and standardized procedure of Scientific Café organization and development to be adopted in the forestry sector, and to offer considerations that can be used in future experiences.

The research was developed in the ambit of the Horizon Europe Project ForestValue2. ForestValue2 brings together owners and managers of national and regional Research, Development and Innovation (RDI) programs in eleven Member States of the European Union (EU) and in one Associated Country with the aim to contribute to the alignment of national research and innovation policies. One of the main objectives of ForestValue2 is the implementation of a joint call, resulting in the funding of transnational collaborative Research & Innovation (R&I) projects. Considering this objective and the importance to guarantee an Open Science approach in the whole project, Scientific Cafés have been promoted and implemented with an aim to collect opinions and information from civil society on key scientific topics, and to share the civil society participants with accurate and reliable information, possibly correcting misinformation on the discussed topics.

METHODOLOGY

Reasons for organizing a Scientific Café

Taking into consideration the classification proposed by Dallas (2006), the Scientific Cafés in the decision-making processes related to forestry sector can be considered at the same time as science communication and as civil society engagement. In this sense, the general objective of a Scientific Café is to raise community awareness about relevant scientific topics such as advances in research, scientific issues, laws, and political milestones.

In particular, the specific objectives of a Scientific Café can be summarized as follows:

- To inform, raise awareness and transfer knowledge from the scientific community to citizens on a current scientific topic;
- To gather information, expectations, needs of citizens on a current scientific topic;
- To define intervention strategies to solve a problem related to a current scientific topic.

In some cases, more than one objective may need to be achieved, for example inform and at the same time gather information, expectations and needs from citizens.

Another crucial aspect to be considered are the desired outcomes produced by the realization of a Scientific Café. In this sense, one the main outcomes are the possibility of collecting quantitative and/or qualitative data from citizens. The

opinions, expectations, needs of citizens are crucial for achieving joint outcomes shared between citizens, scientists, and politicians. Another key outcome of a Scientific Café is correctly informing and correcting misinformation on key scientific issues, disseminated by social networks or other channels of information diffusion.

Characteristics of Scientific Café and role of the support group

The main characteristics of an effective and successful Scientific Café can be summarized as follows (Navid and Einsiedel 2012):

- Open to everyone, no scientific and/or technical knowledge is necessary. This means that the Café is an inclusive event with free access;
- Takes place in public gathering places such as coffee shops, bars, restaurants, bookstores, galleries, outdoors or in an online user-friendly platform. Because of this it is an accessible and informal event;
- A two-way communication process in which the recipient (civil society) and the sender (scientists) are constantly changing role, making the Scientific Café an interactive meeting;
- The civil society takes knowledge on the subject and enable new understandings about the production of knowledge beyond the academy, making the Scientific Café an impactful event.

Scientific Café involves a Café support group, which comprises: i) a person with overall responsibility for the organization of Scientific Café; ii) a facilitator; iii) one or two experts with the role of speakers; iv) a rapporteur. One or more of the abovementioned figures may coexist in the same person.

The person responsible of the event must be thoroughly familiar with the local situation and maintain constant contact with the local area. She/he must also consider how to adapt the event to the local context. It is up to her/him, in collaboration with the group, to carry out, at the end of the event, the evaluation on the effectiveness of the approach taken.

The facilitator has a key role to improve the participatory environment, addressing the more specialized scientific issues in a simple and understandable way. As emphasized by other authors (Elsasser, 2007; Balest *et al.* 2018), the facilitator does not necessarily have knowledge about the scientific issue discussed, but she/he must be able to involve all participants in the debate – regardless of skills and knowledge resources – in the same way. In particular, it is at her/his hands to stimulate those who are less active during the debate.

The facilitators, who design and conduct the Cafés sessions, stimulate a series of parallel conversations around carefully crafted key questions important for the group (Schiele *et al*. 2022). Facilitators encourage all participants – especially experts – to find and use a common language, avoiding scientific terms, that will not be clear to the rest of participants. At the same time, experienced facilitators will be capable to monitor that exactness of meanings be preserved (Fischer *et al.* 2008).

The expert/s should be identified among researchers and professors with high skills in the chosen scientific topic. The experts have the role of conveying key information to bring the debate to life. The choice of experts must focus on

empathic persons with a practical approach to the scientific issue. To reduce the speaking time but eventually have different views, it is preferable to involve two experts, respecting the gender balance (one female and one male). The experts must follow these recommendations during the Scientific Café: i) avoid complex language and technical words; ii) adopt an empathetic and engaging attitude; iii) give at least one example related to the everyday life of citizens; iv) leave the possibility of questions for doubts and curiosities from participants.

The facilitator is supported by a rapporteur who will draw up the final report of the event. The rapporteur transcribes the answers and comments of the participants, possibly making use of the recording of the event. To make this, it is necessary a prior consent of the participants. Rapporteur prepares documentation and informs the participants about the structure and organizational aspects of the event before the start of the Scientific Café. In addition, she/he also takes the responsibility for all logistical and secretarial aspects. The rapporteur must be a person trusted by the facilitator, and during the Scientific Café intervenes in the discussion only at the request of the facilitator.

It is very important that group members make their choices by working closely together.

Main steps of Scientific Café

The organization of Scientific Cafés is structured in five steps as shown in Figure 1.

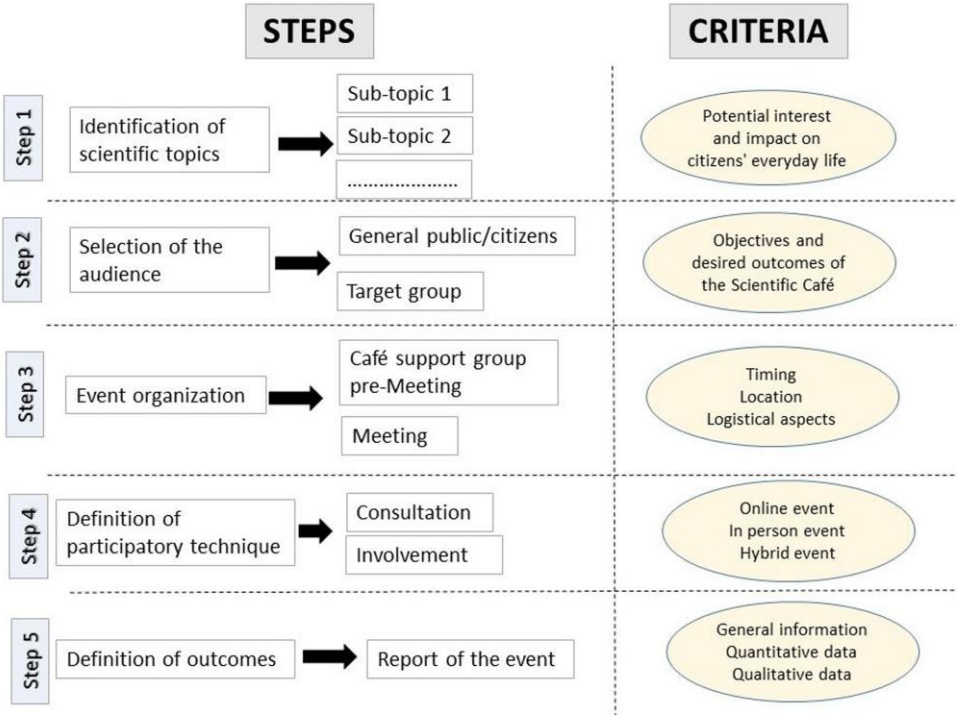

Figure 1. Description of the procedure for the organization of Scientific Cafés

Step 1 - Identification of the scientific topics and sub-topics

In the organization of a Scientific Café, the first step is the identification of the scientific topics to be discussed with the civil society during the event. The criteria used to identify the scientific topics are mainly three:

a) Relevance of the topic for a wide audience or for the selected target groups;

b) Information/disinformation on scientific topics through the mass media and social networks;

c) Concrete repercussions/impacts of the topic on citizens' well-being and lifestyles.

If the topic covers a wide scientific frame, it can be divided into key sub-topics of potential interest and impact on citizens' everyday life. The identification of the key sub-topics should be done in collaboration between responsible of the Scientific Café and experts of the chosen scientific topic.

Step 2 - Selection of the audience

The second step is the selection of the audience – e.g., general public or a specific target group – to address the Scientific Cafés.

Based on the main event's objectives and on the main desired outcomes to obtain from the Scientific Café, it is possible to identify the audience to be addressed to the event, choosing between the general public (citizens) or a specific target group (a segment of civil society or a group of stakeholders). In forestry sector, the citizens involved in the Scientific Café are mainly forest users. Therefore, they can be invited, for example, through forest user associations, trying to take into consideration all interests, such as wood production, products other than wood, rural development, outdoor recreation, quality of life/happiness, and biodiversity conservation. As highlighted in some studies on Scientific Cafés, the specific target group are mainly the following (Mayhew and Hall 2012; Bazilio *et al*. 2016; Balázs *et al*. 2020): middle and high school students; University and post-University students; stakeholders of a production sector; consumers of a particular product category.

When stakeholders are chosen as audience of the events, a stakeholder analysis process is necessary to identify all the different stakeholders belonging to the group (Reed *et al.* 2009; Paletto *et al.* 2015b). As an example, if the stakeholders of forest-based sector are the main audience for Scientific Cafés, the stakeholder identification will be an iterative process aimed at identifying all the categories of stakeholders. Starting from the institutional stakeholders and the main operators of the forestry sector, other representative parties are identified with the aim to take in consideration all the interests and opinions at stake (Figure 2). Based on this evaluation and choice, the publicity of Scientific Cafés will be direct.

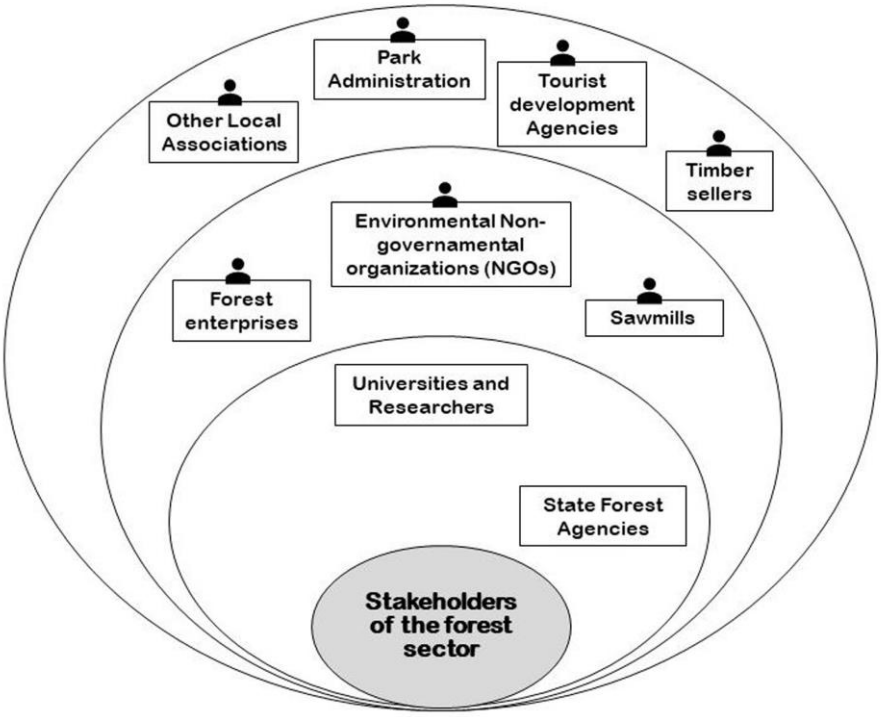

Figure 2. Stakeholders divided into target groups

Step 3 - Event organization

When realizing a Scientific Café there are some rules, based on the experience and on the objectives of the event, that mark the timing and manner of conducting the Café.

A fundamental part of the Café, necessary for the success of the event, is the organization of an online or in-person pre-meeting between the members of the Café support group. In this meeting, the event and the timing are organized in detail. The support group prepares a set of questions to address the most important aspects related to each scientific sub-topic (approximately 3-4 questions for each sub-topic). Then, the timing of the event is discussed: total length of Scientific Café; length of introduction; length of expert interventions; length of participatory process moderated by the facilitator. In addition, the support group defines the most important logistical aspects: i) the materials to be used, such as pc, projector, post-it, blackboards, pens/pencils, or other supporting materials; ii) the tools to be used, such as PowerPoint, videos, engagements tools as Slido (https://www.slido.com), Mentimeter (https://www.mentimeter.com/), Poll Everywhere (https://www.polleverywhere.com/), or others.

During the pre-meeting, the location of the event is discussed, evaluating firstly if the Scientific Café will be realized on an online event platform or in-person in a physical location.

Still in the pre-meeting, the dissemination channels to publicize the event are discussed. Furthermore the project for the Scientific Café poster or brochure and the choice of dissemination channels to invite the participants, such as website, social networks, personal invitations, mass media, or other channels, are done.

Regarding the duration of the event, Scientific Café format has an estimated duration of 90-100 minutes.

The optimal number of participants is less than 30 people; if there are more than 30 participants, it is preferable to divide the discussion into two sessions coordinated by two facilitators and with two rapporteurs. However, the final number of participants must be balanced between the different interest groups to avoid leading the discussion towards only one (or a few) objectives. To this end, all interest groups must be preliminarily invited but asking each institution/association to send only one representative. Besides, the event must be open to welcoming any additional and uninvited participants, always taking into consideration the balance between interests in the distribution of sessions.

At the opening of the event the facilitator introduces the Café concept, the topic, and the speaker(s) in a simple and sympathetic way to grab the attention of the participants. This moment takes around 5 minutes. Subsequently the speakers, who are the scientists, present the topic for approximately 10 minutes without any visual aids. After that, a drink or café is offered to the participants to create a relaxed and informal atmosphere. Then, the facilitator opens the floor for discussion, mainly in a question-and-answer format. This part of the Café takes around 45-50 minutes. During this part, the core of the Café, the facilitator stimulates the debate among the participants based on a pre-prepared set of questions, also with the use of some interactive tools useful to capture participants' views and to make everyone feel connected during the meeting.

Step 4 - Definition of the participatory technique

In order to define the participatory technique to be used, the first issue to be decided is whether to organize the Scientific Café: (1) online, on a web platform, or (2) in-person or (3) hybrid. After that, it is possible to modulate the most suitable participatory technique for the event.

The technique of involving the participants during the Scientific Café is structured in two phases. First there is the consultation of participants through a set of agree/disagree questions. After this, the involvement of the participants is realized through an open discussion and/or through the preparation of the problems and/or strategies tree.

In the consultation phase, the facilitator asks some simple close questions on the scientific sub-topics. In this phase, the use of some interactive tools could

allow to capture participants' views. Specifically, the respondents answer to a set of pre-prepared questions through links.

In the phase of the participant involvement, which is crucial to the success of the event, two different techniques can be employed, whether the event is online or in-person.

In the online Scientific Café, the technique is the open discussion animated by the facilitator. This technique has the objective of involving all participants in expressing needs, expectations, and opinions regarding the scientific sub-topics. The open discussion is suitable to be applied also in outdoor in-person events.

For the in-person Scientific Café, one of the most suitable techniques to be used is the "Problem Tree" and "Strategy Tree" technique, which includes a few basic steps (Figure 3). Firstly, the facilitator and rapporteur distribute some post-it to the participants asking them to write down in 10 minutes what are – in their opinion – the main critical aspects related to the discussed sub-topics. The post-it notes are then given to the facilitator who distributes them on a blackboard by similarity of themes.

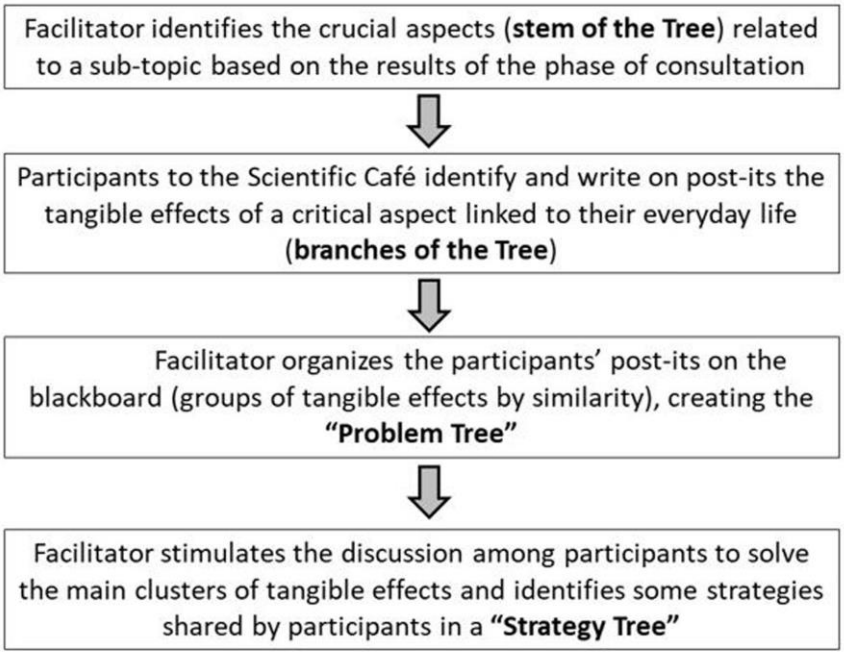

Figure 3. Steps of the participants' involvement during the Scientific Café.

The tangible effects of critical aspects in the everyday life identified by the participants are organized to create the "Problems Tree" (see Figure 4). The aim of the "Problems Tree" is to identify a core critical aspect (stem of tree) and its causes (roots) and tangible effects (branches) according to the logic, values, and

consensus of citizens (Walubengo *et al.* 2019; Paletto *et al.* 2022). In the last part of this phase, the facilitator stimulates the discussion among participants to address/solve the main clusters of tangible effects, the branches of the "Problem Tree". Finally, the strategies identified by participants are organized in a "Strategies Tree" which is shared by all participants. For each "branch" of weakness, the participants define a strategy to overcome the weakness.

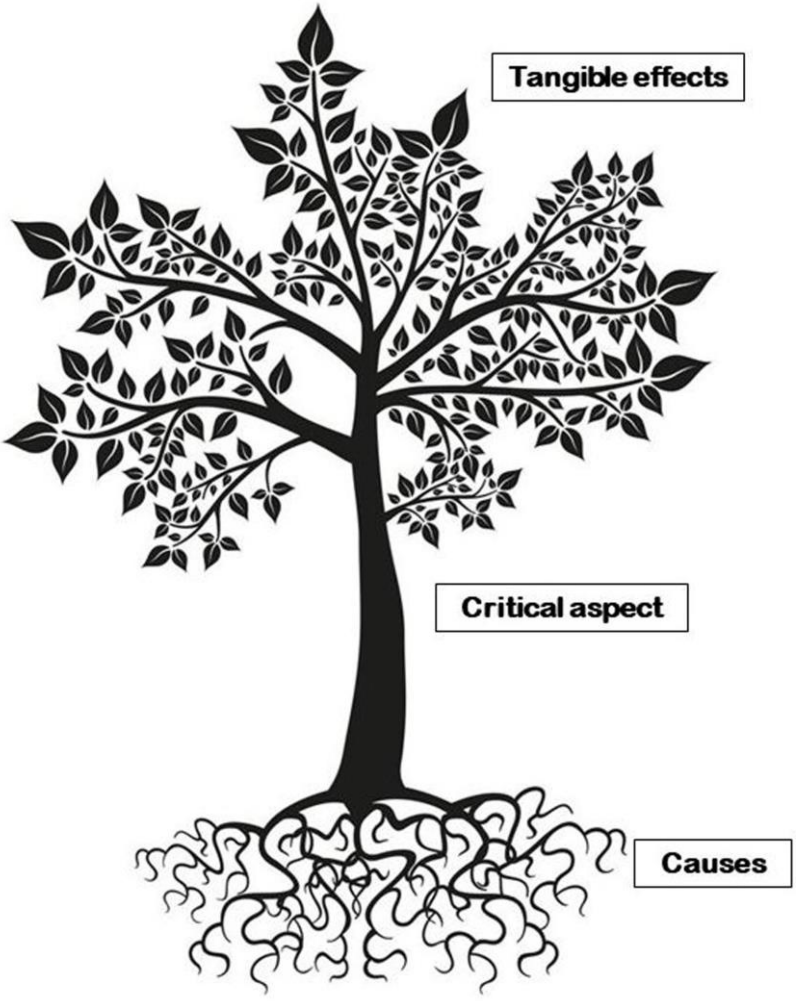

Figure 4. "Problems Tree" related to a scientific sub-topic

Step 5 - Definition of the outcomes

During Scientific Cafés both quantitative and qualitative information on the opinions, expectations, and needs of citizens related to key scientific topics and sub-topics are collected. Whatever the main objective of the event was, certain guidelines must be followed in the collection and dissemination of

outcomes. In case multiple events are organized and different countries and partners are involved, it is essential that standardized reports are produced. The final document of a Scientific Café must contain the outcomes of the event. In general, this document is realized both in the language of the country and in English, to be shared and disseminated also out of the country's boundaries.

To this end, the information to be collected by the rapporteur for each event is the following: i) general information; ii) quantitative data; iii) qualitative data.

General information includes the duration and location of the event and number and typology of participants including those who supported the participatory process.

Quantitative data are the results collected using interactive tools such as EUSurvey, Slido, Mentimeter, Pool Everywhere or others.

Qualitative data are those derived from the "Problem tree" and the "Strategy tree" with highlighted tangible effects and the possible strategies to address/resolve clusters, indicated by participants in the event. In case of online events, results are collected using interactive tools to produce qualitative data.

DISCUSSION AND CONCLUSIONS

In the present article, we described the main objectives and characteristics of Scientific Cafés, and presented a novel procedure for the organization of these events in a simple and standardized way.

A research conducted by the Office of Science and Technology and Wellcome Trust (2001) has shown that non-specialists do not need to understand a great deal of the scientific details to be able to discuss social and ethical issues (OST–WT, 2001). In this sense, there is an increasing number of initiatives tending to promote the interaction between science and society, proposed from different fields. However, spaces in which this public debate could effectively take place are still missing. Scientific Cafés are the right spaces for these initiatives.

These events could support to recognize novel and critical issues for future research and policies in the forestry sector bringing together civil society, scientists, practitioners, and policy makers in the assessment of research fields. Furthermore, these events and the following outreach activities generate reflection and energy for pressing research needs.

In the forestry sector, there are issues like the role of forest for climate change mitigation and adaptation, the forest-based circular economy, where the knowledge production is raising, but the concept itself still lacks an evident analytical framework. Scientific Cafés are suitable tools to involve civil society in these issues, but in these cases, it is crucial that researchers seek to develop rooted case studies to inform and involve civil society. The different Scientific Cafes need to be adapted to local contexts and different situations, while following in principle the procedure developed.

It is important to verify that some main attributes are crucial for the success of the Scientific Cafés. When analysing examples of these events in the context

of natural resources management it becomes clear that one of the most frequent causes of failure arises from not respecting these elements.

Navid and Einsiedel (2012) evidenced that the main reasons for the success of a Scientific Café can be attributed to a few factors. In their experience, the informality and accessibility of the events are essential to valuable transfer of knowledge and gather of information from civil society. This means firstly that timely information is available to all participants and the outcomes of the event are accessible to all, and secondly that people could talk freely, realizing that their opinions are often common opinions.

A friendly and non-competitive environment stimulates discussion and participants feel comfortable. Comfortability means creating an empathetic and engaging attitude, giving the voice to all participants, and stimulating those who are less active.

In five Science Cafés across Canada conducted to analyze civil society awareness of synthetic biology technology, Navid and Einsiedel (2012) demonstrated the effectivity of these tools to engage publics in dialogue about emerging technologies. Due to the Cafés interactive nature, they were able to acquire perspectives that may not have been captured through other approaches.

We would like to stress that interaction between scientists, experts and citizens must be promoted, and the debate among the participants must be stimulated. Reciprocal respect, willingness to listen and ability to compromise are important prerequisites for the success of Scientific Cafés. Another crucial attribute is the inclusiveness: Scientific Cafés must be open to everyone, and no scientific or technical knowledge is necessary to participate.

The communication strategies adopted during the Café need to be adapted to each target group, as different groups are sensitive to various arguments. The three "C" of a good communication and information of participants must be: i) Care; II) Clarity; and iii) Credibility: It means that the facilitator and also the rest of the Café support group need to care of participants through distribution of written materials, respect of time, and any kind of resources and facilities necessary to support participants. Clarity means using a language clear, simple, and accessible for all participants. Finally, credibility is ensured working with sound and reliable information regarding scientific topics.

Furthermore, several contextual factors, such as positive attitudes towards involvement and good relations amongst stakeholders, can enable successful implementation of Scientific Cafés. In this sense, fairness and inclusiveness need to be respected. All different views must be heard and respected, and attention must be given to the answers of each participant.

As highlighted by Balázs *et al.* (2020), Scientific Cafés are low-cost methods useful in the prioritization phase of a research agenda-setting exercise in a stimulating and convivial way. They used these tools to collect perceptions of research needs and to initiate social dialogue around green care in Hungary. They evidenced that maintaining interactions with civil society rests a crucial challenge when defining priorities of a research agenda. Within this context, Scientific Cafés with diverse participants can be useful to achieve a civil society role in co-producing research agendas. However, their experience in using Scientific Cafés

for research agenda setting shows that mainly citizens of a specific target group (e.g., students; institutional stakeholders; professionals) tend to become engaged, rather than general public.

We would like to mention in this study that while there are attributes that can support the success of a scientific café, there are also negative circumstances that can cause its failure.

A study by Mizumachi *et al. (*2011) investigates the approaches in engaging with the civil society in a Scientific Café of 19 early career scientists in Japan. The research evidence that anxiety about dialogue with the citizens may be the greatest barrier for scientists in a Scientific Café. The Japanese experience failed for the reluctance among scientists to interact with the large public. In particular, scientists thought that organizing and holding a Scientific Café was too demanding in terms of time and resources and did not perceive the benefit of the event.

Another important element that must be taken in consideration when organizing a Scientific Café is that not everyone would like to participate. Furthermore, inequities in who is involved and how, and who is not involved, inevitably create biased knowledge production and unequal power relations (Balázs *et al.* 2020). The choice of the right tools and the right way of conducting Café is crucial for the success of the event, demonstrating the high responsibility of scientist who organize Cafés.

Tycova *et al.* (2023) developed Scientific Cafés to reach citizens living and working in the upper Malše river catchment (Czech Republic) that hosts the only remaining naturally reproducing freshwater pearl mussel population in the country. They evidence that among communication strategies for managing citizens and target groups in the forestry sector events such as Scientific Cafés highlighting the current issues and showing better practices are extremely helpful.

Among recommendations of these authors, there is the need to build mutual trust with the target groups. Building a relationship with participants includes providing an opportunity to discuss their needs and expectations and to express points of view. Furthermore, these authors evidence that the feeling of being controlled too much demotivates participants to get involved in the Scientific Cafés. Besides, they highlight that their experience showed that if participants are properly and in advance informed about the events, they are more likely to ask for consultation and are more willing to cooperate.

Finally, we would like to emphasize the importance of having different case studies and experiences available to refine and test the validity of the procedure described. In this sense, the future steps of the study will be to test the proposed methodology in different forestry contexts.

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