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Science as a decision-support tool in forest policies

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Societal reactions to global challenges, such as biodiversity loss, climate change mitigation, or transformation from linear to bio-circular economy, are expressions of high-level policy decisions. The decisions, on the other hand, are always tradeoffs because of the inherent complexity of the global-scale challenges. Despite of the compromise character of the decisions, it is justified to demand that they are based on the best available understanding. Delivering results that contribute to the political decision-making is one of the motivations for scientific publication. Only seldom, however, a single research article – even a scientifically sound one – provides the busy reader with sufficient level of understanding. The challenge of understanding is multiplied in the case of farfetching strategic decisions on complex issues. There are recent examples highlighting that solid science can be dramatically misleading.

A scientific article can typically tackle a single view or fraction of a bigger problem. The more complex the problem, the smaller the share of it covered by one study. No one expects that a single paper on climate change mitigation actions analytically covers the entire topic. Aspects of biological, economic, or societal implications or the mechanisms in individual countries are impossible to discuss comprehensively in a single article – probably not even in ten. This sets a challenge to the authors in terms of documentation of study limitations, as well as conclusions drawn. If the researcher writes the results, discussion, or conclusions of a policy-relevant paper slightly indefinitely, he/she passes the freedom of interpretation to the reader. The same documentation requirements are equally important in articles dealing with more straightforward and tangible issues, such as materials science. Still their misuse may be less common because experimental studies are less frequently referred to in the international policy making processes.

The European Union policies regarding the future values and uses of forest resources are of particular importance in the forested countries of the Union. Economic, environmental, and societal interest groups are fighting for attention in the Brussels. The lobbyists have phenomenal skills to search and select the scientific papers that support their specific agendas and use those in convincing the relevant politicians. Scientists may also have their own agendas, which affect the selection of research topics, as well as fine-tuning of the messages delivered in their publications.

Issues related to the intentional or unintentional misuse of scientific work were pronounced because of the recent, unprecedented interest towards the future of European forests. With a half-an-hour work one can find a dozen scientific articles supporting almost any action to be done or

left undone in forests. These actions, justified by scientific evidence, might still be totally illogical. Misleading interpretations are outcomes of ignorance of other scientific work and subsequent bias in the holistic understanding. While the global challenges require increasing attention and powerful actions from the policy makers, the risks associated with insufficiently prepared decisions are huge. Entire businesses can be wiped out with decisions based on narrow-perspective understanding.

How to overcome this problem? The researchers dealing with policy-relevant issues should right now search for intense collaboration in multi-disciplinary groups of scientists with the aim to publish meta analyses, review articles, and synthesis reports. Such publications ensure wider coverage of relevant scientific works and lay foundations for holistic understanding. The science-policy interface within the forest sector is more topical than ever, and wisdom should not be lost in the jungle of agendas.

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