

Open letter of the scientists of the BIOTIP funding program

20. June 2022 – 14:30 h

Dear Federal Minister Stark-Watzinger,

We are a network comprised of 130 German scientists in at least 30 research groups at German universities and research institutions. We have been collaborating with international partners in seven projects within the BMBF BioTip funding program since 2019. (<https://biotip.org>).

The subject of the funding program is "Tipping Points, Dynamics and Interactions of Social and Ecological Systems". The BMBF has innovatively advanced applied and interdisciplinary research on planetary stability thresholds. On an international level, BioTip projects have generated exemplary research on planetary boundaries and the loss of biodiversity. With this funding program, the BMBF has been instrumental in supporting the German government's pioneering role in national and international efforts to protect biodiversity. Indeed, the German government is one of the world's largest funders of biodiversity conservation (Press Release No. 071/22)¹.

Despite challenging pandemic conditions, the BioTip projects have made significant contributions to research on tipping points in ecosystems and their drivers and impacts. In the second half of 2021, BMBF encouraged all projects to submit their project proposals for the scheduled extension of two years. This timeline was already foreseen in the announcement of the BMBF funding program in September 2015. In 6 of the 7 BioTip projects, proposals were developed in an intensive and time-consuming synthesis process, focusing on implications of results for research and practice. The goal for the second period from 2023 to 2025 is to combine new conceptual insights from the research on tipping points in ecosystems with innovative solutions developed in cooperation with local communities. We estimate expected short-term impact within the two years of extension to be high due to the practical orientation of the projects. Six projects submitted corresponding extension applications for scientific review by February 28, 2022.

On June 9, 2022, all BioTip projects were surprisingly informed that the entire funding program would not enter the announced extension phase. The reason given was "currently lower budgetary funds available and a new focus on research activities that generate short-term impacts". As applicants, we were shocked by the Ministry's decision. Clearly, this decision was not preceded by a review process of the scientific proposals. Sadly, this decision has critical consequences for the success of research planned until the end of February 2023, as established schedules must be shortened to quickly execute all project activities.

The explanation of the decision is incomprehensible to us for several reasons. It speaks of a "new focus on research activities that generate short-term impacts" without even hinting at what kinds of activities these should be and which research fields they cover. In particular, it remains unclear why the extension phase of the application-oriented BioTip projects with a focus on the involvement of decision-makers and the dissemination of results is not expected to generate

¹ <https://www.bmu.de/pressemitteilung/schulze-und-lemke-weltnaturkonferenz-muss-die-wiederherstellung-der-natur-einlaeten>

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short-term impacts. Clearly, the projected funds will be withdrawn from research on climate and biodiversity, policy areas that are otherwise considered to be of high strategic importance. This shift is neither understandable in terms of its content nor acceptable in procedural terms. It harms international research and cooperative relationships that have been built up over many years. In detail:

[1] Specific losses due to the cancellation of the research program:

- Damage for the grantees: lasting damage to the reputation of the currently running projects among numerous research and practice partners, globally but mainly in the Global South.
- Lost scientific output: abandonment of those research phases with the highest expected scientific output and practical implementation and short-term impact compared to completely new projects.
- Discontinuation of the nurturing of young scientists - especially in partner countries.

[2] General losses caused by the cancellation of the research program:

- Lack of traceability of the decision: no developments were mentioned that would have objectively reduced the need for research as originally formulated.
- Lost opportunities in the investment of approximately €25 million of taxpayers' money, as the revenue phase of the program is cancelled.
- Non-compliance with scientific review standards: rejection of project outlines is not scientifically justified despite request for project submission.

[3] Political losses due to the discontinuation of the research program:

- Germany is involved in numerous free trade agreements or is currently negotiating them (e.g. Mercosur). Amid growing requirements for German companies to structure supply chains sustainably, understanding and shaping sustainable structures (social and environmental) in producer countries is key to meeting expectations. There are synergies between research and business.
- BioTip's projects are designed to contribute to international bodies such as IPBES (biodiversity), CBD and climate COPs. This will now only be possible in a limited way, due to the lack of field validation of results and the difficulty of transferring them into practice. For ethical research reasons, such a practice should no longer exist today.

Furthermore, the pages 29/30 of the German coalition agreement state the following:

*"Preserving biodiversity is a human task and an ethical obligation. We want to protect and improve biodiversity, ensure its sustainable use and exploit the potential of natural climate protection. To this end, we are making an ambitious contribution at international level, strengthening nature conservation and seeing cooperation with land users as a central building block. We will take and finance the necessary measures. At the Biodiversity Conference, we will advocate an ambitious new global framework. **We will significantly increase our financial commitment to implement the global framework.***

Within the framework of the Convention on Biological Diversity (CBD), we are working in the spirit of the European Biodiversity Strategy to achieve 30 percent of protected areas and to protect them effectively. For national implementation, we will further develop the National

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Biodiversity Strategy (NBS) with action plans, concrete targets and measures, anchor it in a binding manner and strengthen scientific monitoring."

The BioTip program is developing the scientific basis for implementing precisely these goals mentioned in the coalition agreement and, after four years, has identified realistic starting points for local collaborations to this end.

In light of the arguments listed, we therefore ask you to reconsider this decision and to ensure at least one year of phase-out funding for all projects. We ask you to comment on the above assessment.

We will present our request to the parliamentary Committee for Education and Research and will also inform the public opinion about these processes.

Kind regards,

The scientists of the BioTip program (national & global):

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Prof. Dr. Georg Guggenberger, PRODIGY, Director of the Institute of Soil Science, Leibniz University Hannover, Germany

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Dr. Diego Menestrey Schwieger, NamTip, Institute for Ethnology, University of Cologne

Dr. Alexandra Sandhage-Hofmann, NamTip, - General Soil Science and Soil Ecology, Institute for Crop Science and Resource Conservation (INRES), Bonn University

20.06.22 - from 16 h

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Dr. Jan Göpel, PRODIGY, University of Koblenz-Landau

04.08.22 – from 8 h

Dr. Thanh Noi Phan, MORESTEP, PostDoc, Ludwig-Maximilians-Universität, Munich, Germany