

INVESTIGATING THE RELATIONSHIP BETWEEN SCIENCE DIPLOMACY AND GLOBAL DGT: THE ROLE OF INCLUSIVE METASCIENCE OBSERVATORIES

The key aim of this project is to examine the role of science diplomacy as a strategic instrument to address threats to democracy, governance, and trust (DGT).

Science as a social institution can reflect democracy, but it can also have a profound impact on politics and the public, directly influencing DGT. In the project, we will explore the relationship between DGT and science and how evidence-based scientific diplomacy can be used to strengthen them, through the mechanism of *metascience observatories*.

The project will utilize qualitative and quantitative methods to (1) understand the relationship between science diplomacy and DGT; (2) conceptualize and operationalize metascience observatories and investigate the extent to which they can be leveraged to improve science diplomacy; and (3) explore how threats to DGT could be mitigated and opportunities seized through inclusive metascience observatories. Several key research questions will drive this project:

- How can science diplomacy improve DGT and interaction among countries? What are the information needs for productive and equitable science diplomacy? To what degree are these needs universal and what variations can be observed by country? What are the challenges for policy makers in taking up and making effective use of such information? How can this information help scientists participate more effectively in science diplomacy?
- What constitutes a metascience observatory? Where are metascience observatories located around the globe and how are they resourced? To what degree do they interface with national and international science advisors and diplomats? To what degree can metascience provide an empirical basis for science diplomacy? How could metascience observatories more efficiently provide scientific information to policy makers without amplifying and reifying disparities? How do different structures of observatories across the globe provide these opportunities?
- Who owns these data, how are they made available? How can these data be used to mitigate threats to DGT?

The main outcome of the project will be to identify and engage metascience observatories around a common agenda that will contribute to supporting DGT through the study of science diplomacy.

Making science a powerful instrument contributing to the support of DGT, through the mechanisms of metascience observatories and science diplomacy, requires modelling the complex relationship between these idiosyncratically understood concepts. We begin with a simplified model of this relationship, which will be refined throughout the process. Our study will aim to provide a clear theoretical and applied model exploring the potential of meta-science observatories to influence DGT through informed diplomacy.