

Developing a new set of guidelines for the intercultural assessment synthetic biology applications that could have an impact on biodiversity

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Aims

The project develops a strategy for including the views of grassroots communities such as Indigenous peoples, smallholder farmers and pastoralists in evaluations of new biotechnologies, particularly focussing on the potential release of genetically engineered organisms into natural systems. Our aim is to formulate guidelines for assessment processes that can be a resource for those involved in the negotiation of international agreements, such as those contained in the Convention on Biological Diversity (CBD).

Background

At BfN, approaches are being developed to contribute to horizon scanning, monitoring and assessment of synthetic biology applications by making existing knowledge more readily accessible. Technology assessment (TA) is used for inter- and transdisciplinary integration of scientific, local and experiential knowledges. While other BfN projects develop an overview of evidence gathered by scientists, the *ICA* project focusses on a form of TA that includes local community perspectives – including expertise built through lived experience of being peasant farmers or Indigenous peoples. This approach takes into consideration that the perspectives of grassroots communities have often been excluded from the processes whereby new technologies are conceived, developed and applied, resulting in harm to local communities and the environment. When consultations have taken place, they have often been perceived as instrumentalising or as biased towards generating acceptance. To avoid such pitfalls, the project is developing a strategy to promote transparency and legitimacy with regard to the way the issues are framed, the choice of topics, as well as procedures of organisation, facilitation and communication of the assessment process.

Current status

Two exploratory processes of assessment have been undertaken: the first (A1) in Santiago, Chile, the second (A2) in Guelatao, Oaxaca, Mexico, involving fifty and seventy people, respectively, from peasant and Indigenous communities. The topic was the assessment of genome editing and gene drives. A central finding of A1 was the importance people place on free, prior and informed consent (FPIC) taking place before new technologies are released in their ecosystems. Insights from AF1 were used to produce pictorial representations of the issue to aid inclusive dialogue among people in AF2, where in addition, discussions also took place in indigenous languages. The need for more information about the technology, its application scenarios and potential impacts and side effects was expressed, as well as a desire to have further in-depth discussions of the issues in future events, i. e., some continuity in the involvement. The project thus shows that snap-shot type interaction is insufficient to incorporate the views of potentially affected Indigenous peoples and local communities (IPLC) in regions of potential application. Rather, there is a need for repeated cycles of information and exchange.