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Addressing conflicts of interest in CBD processes

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The topic of Conflicts of Interest is on the agenda at COP14 in Sharm-El-Sheikh. The proposed outcome on disclosure of interests is an important first step in the right direction as it will contribute to the transparency, inclusiveness, integrity and credibility of processes under the Convention and its Protocols. The decision needs to be strengthened, and should be the start of a comprehensive mechanism in the CBD fora. In this context the extension to open-ended online fora should be considered.

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Two things are important to keep in mind. First, any mechanism to address conflicts of interest should be focused on preventing private, financial and vested interests which conflict with the public interest. These types of interests are measurable and it has been shown for example that the source of funding has an impact on the conclusions of published studies. Second, conflicts of interest should be assessed against the objectives, purposes and principles of the Convention and its Protocols. In addition we suggest there should a definition of conflicts of interests in the context of the CBD included.

The issue of conflicts of interest has already been addressed extensively in other international processes such as the UN Framework Convention on Climate Change, the World Health Organization, the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) and the Organisation for Economic Cooperation and Development (OECD). This is because international governance of critical issues often see vested interests at play, with industry funding and participation sometimes not fully disclosed.

The Gene Drive Files¹ that were published nearly one year ago demonstrated that the CBD is not free from undue influence from industry and vested interests. A private agriculture and biotechnology PR firm called Emerging Ag recruited at least 65 people to participate in the CBD Online Forum on Synthetic Biology, intending to skew the outcomes; a project for which Emerging Ag had been paid \$1.6 million by the Bill and Melinda Gates Foundation. In addition, evidence was published of appointees to the expert group having relevant financial interests through the institutions they represent that had not been declared in CBD forums.

Activities to influence CBD Online Fora were also undertaken by a lobby group called Public Research and Regulation Initiative (PRRI). CEO's report Biosafety in Danger² published just ahead of the last SBSTTA in July, showed how PRRI coordinates circles of industry, researchers and 'like-minded' regulators through dedicated email lists, providing a 'backup team' to support delegates at official meetings and training groups of students to echo industry positions at lobby and side events.

Where issues of the utmost importance like protection of biodiversity, access and benefit sharing of genetic resources, or international biosafety regulations are concerned, it is absolutely necessary to take all appropriate measures to prevent commercial and vested interests from intransparently and unduly influencing the processes of the CBD and its Protocol.

1 etcgroup.org/content/gene-drive-files

2 corporateeurope.org/food-and-agriculture/2018/06/biosafety-danger

What is on the horizon?

Biodiversity and gene drives

Statement by Critical Scientists Switzerland (CSS), the Federation of German Scientists (VDW) & the European Network of Scientists for Social and Environmental Responsibility (ENSSER)

Technology should advance and not hinder the three main goals of the CBD: the *conservation* and *sustainable use* of biodiversity, and the *fair and equitable sharing of benefits* from its use.

CSS, VDW and ENSSER believe that a key priority is the establishment of a robust mechanism for regular horizon scanning, monitoring and assessment of developments in the field of synthetic biology with regard to their impacts on the CBD objectives.

One of the most controversial innovations in synthetic biology is engineered gene drives, a technology being propelled rapidly by the advent of new genetic engineering techniques, particularly CRISPR-Cas. The aim of gene drives is to intentionally modify or exterminate wild populations or even entire species. 'Global' gene drives – sometimes called 'standard' gene drives - have the potential to be invasive across any existing population of a targeted species that comes into contact with them, as well as some close relatives. CRISPR-based gene drives raise the following serious questions for the conservation of biodiversity.

1. Gene drives, conservation and ecosystem disruptions

CRISPR-based gene drives are claimed to aid biodiversity goals, e.g. by eradicating populations of invasive species, protecting vulnerable populations from disease, and adding diversity to species experiencing genetic bottlenecks. However, while the ability of gene drive organisms to perform according to 'plan' is largely hypothetical, the associated risks to biodiversity are very real. Even some advocates of gene drives have suggested that "conservation and invasiveness don't mix". CRISPR-based gene drives aimed at other goals (e.g. disease control) will have an impact on the ecosystem of the targeted organism (e.g. disease carrier). CRISPR-Cas itself turns out not to be as accurate and controllable as often claimed.

Further, the ecological consequences of eradicating or altering a species or population must be taken into account. Thus, it is becoming increasingly doubtful that all potential impacts of gene drives on biodiversity are sufficiently predictable and controllable. CRISPR-based gene drives may carry a risk of dangerously affecting the balance of ecosystems.

2. Adequate risk research & assessment without deployment is not possible

Adequate risk research of CRISPR-based gene drives without release into the environment is not possible. Research on mechanisms of engineered gene drives and on how to get them to work in target organisms is proceeding rapidly in the laboratory. However, the much needed work on gene flow and population dynamics in the environment, the genetic variability and the different resistance response capabilities of target organisms is not keeping up.

This presents a serious problem: how do you properly assess something before deployment if you can only test it by deploying it? Any specific guidance on risk assessment of gene drive organisms must include this particular feature of gene drives. This feature may be a warrant for a moratorium on their release. It also points to the need to seriously update and adapt current risk assessment methodologies to specifically address these challenges. At the same time, it is imperative that there be strict contained use standards applied to any research involving gene drive organisms, for even a small unintended release may result in extensive spread of the gene drive.

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3. The challenges for genuine participation in consultation

In relation to the participation of the people in whose environment the gene drive organism is deployed or who will be affected by its deployment, we refer to principle 10 of the Rio Declaration on Environment and Development, which calls for participation of all concerned citizens. The likelihood of the transboundary – even global – spread of gene drives makes this sort of participation extremely difficult to achieve. Questions about the deliberate extinction of species are largely unfamiliar to the public, while access to the information necessary for fully informed participation is currently lacking.

In particular, the full and effective participation of indigenous peoples and local communities in the discussions and decision-making on gene drives is necessary. Their free, prior and informed consent is needed. This is in accordance with the UN Declaration on the Rights of Indigenous Peoples.

4. Regulatory challenges posed by gene drives

Finally, the legal and regulatory regime to deal with gene drives is currently inadequate. While there are existing international regulations relevant to gene drives, there are gaps in terms of addressing the specific challenges posed by gene drive organisms, notably the high potential for transboundary and unintentional spread. The CBD and its Protocols currently offer the best overall structure for gene drive governance at the international level, but there are specific gaps that urgently need to be addressed. Though liability for any ecological damage must be regulated, physical redress (restoration) of ecosystems will not be possible due to the nature of gene drives. In addition, gene drive technologies are inherently dual use, meaning that they could be used for both peaceful and malevolent uses. The US Defense Advanced Research Projects Agency (DARPA) is reportedly the

largest funder of gene drive research, raising some discomfort. The security threat posed by gene drive technologies needs to be specifically and effectively addressed.

Unprecedented human intervention in biodiversity

Each of the concerns above indicates an overall ethical point about gene drive technologies. This technology takes human intervention into natural processes to an unprecedented new level. Interfering with Mendelian inheritance in wild populations assigns humans a managerial role over ecological and evolutionary processes unlike any they have assumed before. This is a change of relationship between humans and their natural environment of considerable ethical consequence. A good deal more scientific, social, political, and legal work and dialogue needs to take place before deciding to embark on such a change.

Conclusions – a moratorium is required

It becomes clear that CRISPR-based gene drives carry a serious risk of causing damage to the conservation and sustainable use of biodiversity, while it is hardly possible to conclusively assess the risks to these CBD objectives. This is clearly a case for applying the Precautionary Principle laid down as Principle 15 in the Rio Declaration on Environment and Development. This means for the time being gene drive organisms should not be released, even if the intention is an ethical one. Therefore we call for a moratorium on the release, including experimental release, of organisms containing engineered gene drives. Unintentional releases of gene drives from contained use should equally be avoided, while monitoring, liability and financial redress arrangements are urgently needed, even though physical redress of ecosystems will be impossible.

A longer version of this statement with literature references can be found on www.criticalscientists.ch/en

The opinions, commentaries, and articles printed in ECO are the sole opinion of the individual authors or organisations, unless otherwise expressed. The CBD Alliance thanks USC Canada for their support for the ECO.

Submissions are welcome from all civil society groups.

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UN Declaration on the rights of peasants and other people working in rural areas

La Via Campesina & IPC for Food Sovereignty

The *Third Committee (Social, Humanitarian and Cultural)* of the UN General Assembly voted in favour of the *UN Declaration on the rights of peasants and other people working in rural areas*, through the Resolution no. A/C.3/73/L.30. It was approved by 119 votes in favour, 7 votes against and 49 abstentions.

The UN Declaration aims to provide a better protection of the rights of all rural populations including peasants, fisherfolks, nomads, agricultural workers and indigenous peoples and to improve living conditions, as well as to strengthen food sovereignty, the fight against climate change and the conservation of biodiversity. The endorsement of the UN Declaration also constitutes an important contribution to the international community's effort to promote family farming and peasant agriculture.

The Committee's approval of the UN Declaration was marked by some debate but it benefited of a consistent support from the African, Asian and Latin American regions. Some negative reactions came from Europe and other regions, with the US delegation rejecting the text as they have long-standing concerns

about the UN Declaration, which sought to expand upon existing rights, singling out the human rights of peasants above those of other groups, and also on the collective rights stipulated in the contents. The European countries were divided in their response.

After many years, the peasants' movements succeeded to win this battle. The struggle continues and it is still far to be won, but it is a first step towards the recognition of the peasant's role to guarantee a better and more sustainable future for our society. The Declaration highlights the importance of peasantry in the multiplication of the agricultural biodiversity and the conservation of the "underutilized" species.

Now, the Declaration will be voted in the Plenary Assembly of the UN in New York for its official recognition, before the end of the year. We are sure that the Declaration on the rights of peasants and other people working in rural areas will be taken in consideration also for the Strategic Plan on Biodiversity, since the harmonization of the processes related on Biodiversity is one of the objectives of the Convention on Biological Diversity.

Environmental Defenders

Global Witness defines them as 'people who take peaceful action to protect land or environmental rights, whether in their own personal capacity or professionally'.

As *Global Witness* reports, 2017 was the worst year on record for the murder of environmental defenders. And agribusiness became the industry linked to the largest number of killings. The dead included indigenous leaders, environmentalists, and community activists. They were murdered trying to protect their lands and their communities from industries in which we are meant to be mainstreaming biodiversity, such as mining and agriculture, with murders connected to coffee, bananas and palm oil.

Both governments and industries may be complicit in these murders. It is essential that communities are heard and are able to reject projects proposed for their lands and that the rights of Indigenous Peoples are recognised and secured.

If laws are not in place, if governments are not strong enough, then criminals may feel that they can act with impunity. Sometimes governments and companies are known to collude with murderers. *Global Witness* indicates large corporations, paramilitary groups and governments as the main culprits.

Journalists play a crucial role in exposing these matters, and they themselves may take considerable risks while investigating them.

"For their tireless work in empowering communities and protecting ecosystems, environmental defenders are killed in startling numbers. Murder is not the only way environmental defenders are persecuted; for every 1 killed, there are 20 to 100 others harassed, unlawfully and lawfully arrested, and sued for defamation, amongst other intimidations"

– John Knox, formerly the first UN Special Rapporteur on Human Rights and the Environment.