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Food Systems Transformation Requires Strong RIO Conventions!

An open letter to Heads of Multilateral Environmental and Food System Governance Bodies.

In 2022, all Conference of the Parties (COP) sessions to the three Rio Conventions held a dedicated "Food Day." This drew greater attention to the interlinkages and interdependencies of climate, land, biodiversity, and food systems transformation.

We at TMG Research gGmbH – a not-for-profit research organization of the Berlin-based TMG-Thinktank for Sustainability – work with diverse partners at local, national and global levels to explore systemic entry points and pathways for strengthening food systems governance.

Having actively participated at all three Food Days, our main takeaway is that Food Days can be the starting point for a strategic and impactful involvement of the Rio Conventions in transforming food systems. A stronger role for the Rio Conventions will strengthen their respective roles as stewards of climate, land and biodiversity in all efforts to transform food systems.

We specifically propose that – within their respective, and internationally agreed, mandates – the Rio Conventions should:

- Jointly monitor and assess the progress made in food systems transformation regarding climate, land, and biodiversity.
- Present, in an annual report, the status of negative and positive externalities of food systems and their impact on climate, land, and biodiversity.
- Make proposals on how food system transformation pathways can and need to contribute to achieving the internationally agreed targets of the conventions.

We are convinced that a different and stronger role for the Rio Conventions in the ongoing debate about food systems transformation is indispensable to achieve their mandate and to achieve "Zero Hunger" in a sustainable way.

Based on our research and intensive discussions with local, national and international stakeholders, we call for the following actions:

1. Position the Rio Conventions centrally in the governance role of food systems transformation

With the proposed annual reporting on the interlinkages between food systems and climate, land and biodiversity the Rio Conventions could further develop the Food Days as an inclusive monitoring platform. The role of this platform would be to track progress towards climate change mitigation and adaptation, land degradation neutrality, and the conservation and sustainable use of biodiversity in food systems. Hence, the Rio Conventions will serve as stewards of the natural resource base of food production and become – within their respective mandates – independent and neutral advisers on progress made to achieve a healthy planet underpinning food security for all.

2. Assess the real costs of unsustainable food systems with True Cost Accounting

Today's food systems generate an overall annual value of around 10 trillion USD and contribute to an estimated 6-10 trillion USD in negative externalities for natural, social and human capital annually. The environmental costs emanating from food systems are estimated to be in the range of 5 to more than 9 trillion USD annually. This huge environmental damage caused by unsustainable food systems will hamper the achievements of the three Rio Conventions. Transforming food systems is a pre-condition for achieving the Rio mandates! Therefore, it is necessary that Rio Conventions create awareness that a large part of their mandate is to deal with the damage caused by unsustainable food systems. True Cost Accounting tools can make the economic magnitude of this damage visible!

3. Integrate a new financial mechanism for the Conventions in all efforts to transform food systems

The magnitude of negative externalities is one of the reasons why food systems are considered to be “broken.” Until now, the consequences for the Rio Conventions of large-scale environmental degradation linked to these incredibly high costs have not been systematically discussed. How can the Rio Conventions best make use of these insights to play a greater role in defining food systems transformation? What would happen if Principle 16 of the 1992 [Rio Declaration on Environment and Development](#) – also known as the “polluter pays principle” – is placed at the centre of negotiations towards a new financial mechanism for these global goals, which have subsequently been confirmed by the 2030 Agenda on Sustainable Development? Again, the Rio Convention Food Days could trigger these much-needed discussions.

4. Strengthen environmental governance in food systems transformation

As the world grapples with the consequences of multifaceted anthropogenic crises, TMG Research and a consortium of international experts and partners have analyzed the impacts of so-called 4Cs (Climate, Conflict, Covid and Costs) on food systems and planetary health. Our proposal to systematically strengthen the role of Rio Conventions in food systems transformation is built on several of our research workstreams:

- [“FORESEE \(4C\) – The Transformation of Agri-Food Systems in Times of Multiple Crises”](#) (funded by the German Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection and designed in partnership with WWF-Germany and corsus)
- [Good governance](#) in the management of land and natural resources (funded by German Federal Ministry for Economic Cooperation and Development)
- [True Cost Accounting](#) of food systems’ environmental, social and health impacts and hidden costs (funded, among others, by European Union’s Horizon Europe Research and Innovation programme)
- [Urban food systems transformation](#) in three African cities: Cape Town (South Africa), Nairobi (Kenya), and Ouagadougou (Burkina Faso) (funded by German Federal Ministry for Economic Cooperation and Development)
- [Social innovations](#) for strengthening inclusive governance and mutual accountability of regional governments, local communities and development partners in western Kenya (funded by German Federal Ministry for Economic Cooperation and Development)

TMG is convinced that food systems transformation cannot be achieved without a stronger role for the Rio Conventions! Together with our partners, we would be happy to further elaborate on the ideas highlighted in this note in order to realize a strengthened role for the Rio Conventions in food systems transformation. This will further contribute to realizing the dual Agenda 2030 aspirations of leaving no one behind while delivering much-needed ecosystem services in a sustainable way.

Yours sincerely,



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