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Database on downscaled biodiversity targets

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RAINFOREST PROJECT SUMMARY

Co-produced transformative knowledge to accelerate change for biodiversity

Food and biomass production systems are among the most prominent drivers of biodiversity loss worldwide. Halting and reversing the loss of biodiversity therefore requires transformative change of food and biomass systems, addressing the nexus of agricultural production, processing and transport, retailing, consumer preferences and diets, as well as investment, climate action and ecosystem conservation and restoration. The RAINFOREST project will contribute to enabling, upscaling and accelerating transformative change to reduce biodiversity impacts of major food and biomass value chains. Together with stakeholders, we will co-develop and evaluate just and viable transformative change pathways and interventions. We will identify stakeholder preferences for a range of policy and technology-based solutions, as well as governance enablers, for more sustainable food and biomass value chains. We will then evaluate these pathways and solutions using a novel combination of integrated assessment modeling, input-output modeling and life cycle assessment, based on case studies in various stages of the nexus, at different spatial scales and organizational levels. This coproduction approach enables the identification and evaluation of just and viable transformative change leverage points, levers and their impacts for conserving biodiversity (SDGs 12, 14-15) that minimize trade-offs with targets related to climate (SDG13) and socioeconomic developments (SDGs 1-3). We will elucidate leverage points, impacts, and obstacles for transformative change and provide concrete and actionable recommendations for transformative change for consumers, producers, investors, and policymakers.

EXECUTIVE SUMMARY

Ambitious goals and targets to bend the curve of biodiversity loss and "live in harmony with nature" have been stated in the Kunming-Montreal Global Biodiversity Framework (KMGBF). The KMGBF formulates goals and targets to be achieved on a global scale but will be implemented on a national scale by its member states, which must update their National Biodiversity Strategies and Action Plans (NBSAPS) and set national targets to collectively contribute to achieving the global ambitions of the KMGBF. Both justice and values for nature have been highlighted as important leverage points in transformative change for biodiversity, and different perceptions of justice and value perspectives for nature may influence what is seen as an appropriate distribution of efforts towards global biodiversity targets.

As part of the RAINFOREST project, we approach this by downscaling targets formulated at the global level to quantitative contributions of individual countries, according to scenarios that are informed by different perceptions of distributional justice and value perspectives for nature. We focus on three KMGBF targets relevant to food/biomass production and consumption and to land use: target 3 aiming for conserving at least 30% of land and sea by 2030, target 7 aiming, among others, to reduce excess nutrients lost to the environment by half and target 16 aiming to reduce the global footprint of consumption in an equitable manner. This exercise aims to explore possible quantitative implications of different perceptions of distributional justice and value perspectives for nature in the context of the pathways for transformative change for biodiversity developed within the project. Results of these analyses, as presented in D1.3, are not intended to be blueprints for quantitative target setting at the national scale, but to inspire and support discussions on burden sharing related to collectively achieving global biodiversity targets and the implications of justice and value perspectives in this context.

D1.3 contains data and a metadata file (inludeding details on included data files and their structure) for the downscaling scenarios in the context of KMGBF targets 3, 7 and 16, while D1.2 contains a section describing the underlying rationale, methods and data in more detail and highlighting some results and next steps.