Innovation from across – Can cross-pollinating sectors, actors and conversations unfold solutions towards systemic change?

Why do we need systemic transformations? The effects of climatic, demographic, environmental trends and overexploitation of resources are reinforcing each other, combining into a 'perfect storm'. The increasing toll of climate change becomes visible. Hunger, malnutrition and demographic pressures challenge our well-being. Biodiversity and ecosystems are under threat on land and in the oceans. Unsustainable systems are calling for systemic transformations. The food system is at centre stage, contributing to the problems and holding substantial potential for solutions. A truly sustainable bioeconomy which is regenerative, circular and inclusive can deliver systemic solutions for planetary health enhancing life- and prosperity-supporting ecosystem services and driving the transition towards a clean economy.

How can 'innovation from across' contribute? Innovation from across means innovation across sectors and disciplines, across actors and communities, across issues and conversations. New players such as Philips or IKEA have engaged as food system actors. Evolving lifestyle and dietary trends are unfolding opportunities for new protein alternatives. Citizen concerns about sustainability and ethics are triggering innovation to trace and clean up value chains through block chain or provenance technologies. Examples of successful or promising cross-pollination abound. How to apply AI and robotics to manage complexity or move sustainable intensification into 3D? What could advances in space agriculture mean for personalized ultra-local food? Will craft beer become a model for innovating a new generation of synthetic DIT-food produced in neighbourhood biorefineries? How can impact investment and disclosure of non-financial information trigger responsible business models, showcase sustainability and gain new customers? How can breakthroughs on the soil microbiome unlock new pathways for plant fertility and climate change mitigation? How can new approaches in biotechnologies team up with the conversations on environment and planetary health, unlocking new solutions for biodiversity recovery, bioremediation or secondary mining? Could the bioeconomy evolve to do more than substitution of fossil products and become a provider of nature-based solutions?

Co-creation and cross-creation in the Anthropocene. Such examples highlight the importance for science, policy and business to move beyond silos. With complexity, uncertainty and unpredictability as the new normal, co-creating and cross-creating solutions on the right side of history may become increasingly important if we want to turn the emerging Anthropocene into a success.