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“Exploring opportunities ...  
for managing natural resources and a better life for all”

## The role of science and innovation in delivering the SDG – nature based solutions with trees

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### Abstract

The year 2023 “smashed” the record for the hottest year by a huge margin, providing “dramatic testimony” of how climate is threatening human and planetary health. We are dangerously close to – and in some cases, crossing – catastrophic ecological tipping points accompanied by major shifts in the global economy and an unacceptable increase in inequality. But it is not too late. Healthy agricultural and forested landscapes have a key role in changing these trends. They can deliver one-third of the climate solution – soil accounts for one-third of the global carbon stock and forests net-absorb 1.5 times more CO<sub>2</sub> than the US emits annually. Crucially, they can do that while enhancing the biodiversity and soils that underpin livelihoods and sustainable food production. While there are still unknowns that will benefit from science, we don’t have the time to wait. We need to leverage cutting-edge research to drive tangible impact for communities and ecosystems. We need to implement projects around known solutions while embedding research to understand how to scale. The biophysical evidence is mostly there, the bigger unknown is the human side - people’s behaviour. Research to understand how and why people can become change makers, what holds them back is crucial. We need to combine scientific expertise and analytical skills with exceptional communication skills to bridge gaps between research, policy, and practical implementation and we need to translate complex scientific concepts into compelling narratives for diverse stakeholders.