Food and Agriculture Organization of the United Nations

SUSTAINABLE DEVELOPMENT GOALS

Nature Based Solution For addressing Climate Change and Poverty

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Discussion points

- Are poverty reduction and GHG emissions goals are really conflicting?
- How NBS offers a dual solutions for both climate change adaption and poverty reductions ?
- What are Scopes for NBS applications?
- What are the key constraints in mainstreaming the NBS

Key Transitional Challenges for Climate Change and Poverty Reduction

Transition towards high economic growth to address poverty

Transition towards greener paths as past economic growth has been achieved at the cost of the environment

These two are rarely aligned together

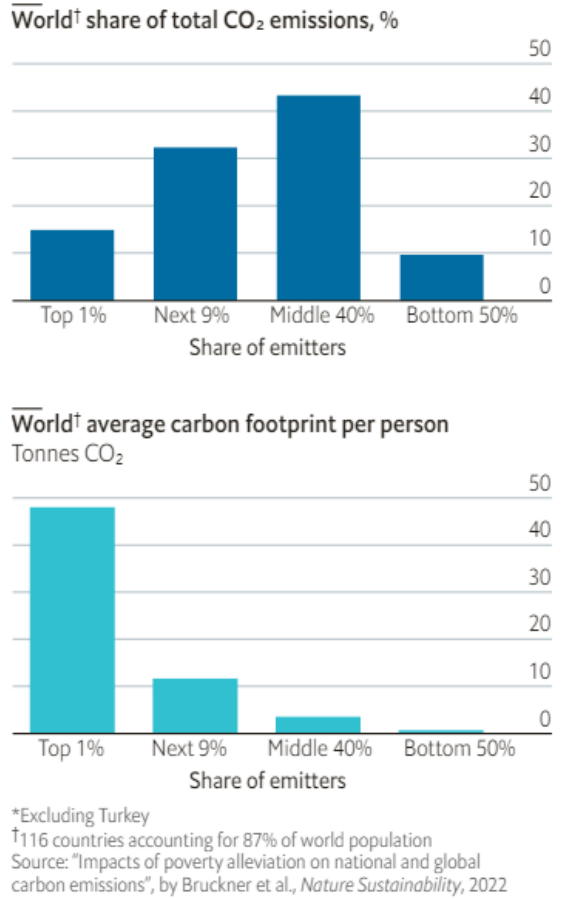
reducing poverty are often excuse to commit for averting a climate disaster.

Climate Change and Poverty Context

In 2014,

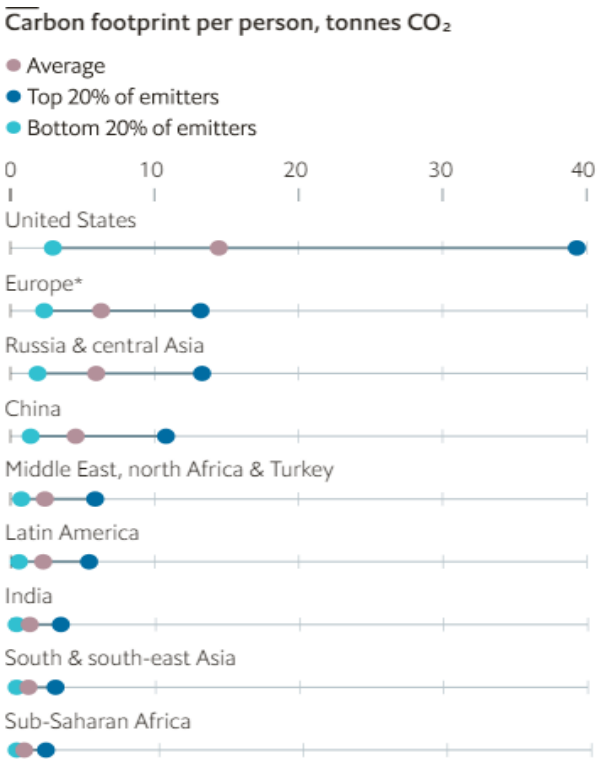
- top 1% of global emitters were responsible for 15% of global emissions
- the bottom half accounted for just 10% of emissions.
- The average American had a carbon footprint 11 times larger than that of the average Indian.
- The top 20% of American emitters had an average footprint 400 times larger than that of the bottom 20% in sub-Saharan Africa.

Source : the economist (??)



Climate Change and poverty context

- In 2014, the 350m Indians in extreme poverty were thought to account for just one-tenth of their country's emissions
- Lifting them out of extreme poverty would increase India's emissions by just 4%.
- And lifting the 1.2bn people included in the analysis out of extreme poverty in 2014 is reckoned to lead to an increase of just 1% in global emissions.
- if 3.6bn people were lifted above a poverty line of $5.50 a day, emissions would increase by just 18%
- if the world's top 50% of emitters halved their carbon footprints, total emissions would fall by 40%.



NBS: a dual goal for climate change mitigation and poverty reduction

Most of the world's poor live in rural areas where their livelihood depends on natural resources and agriculture

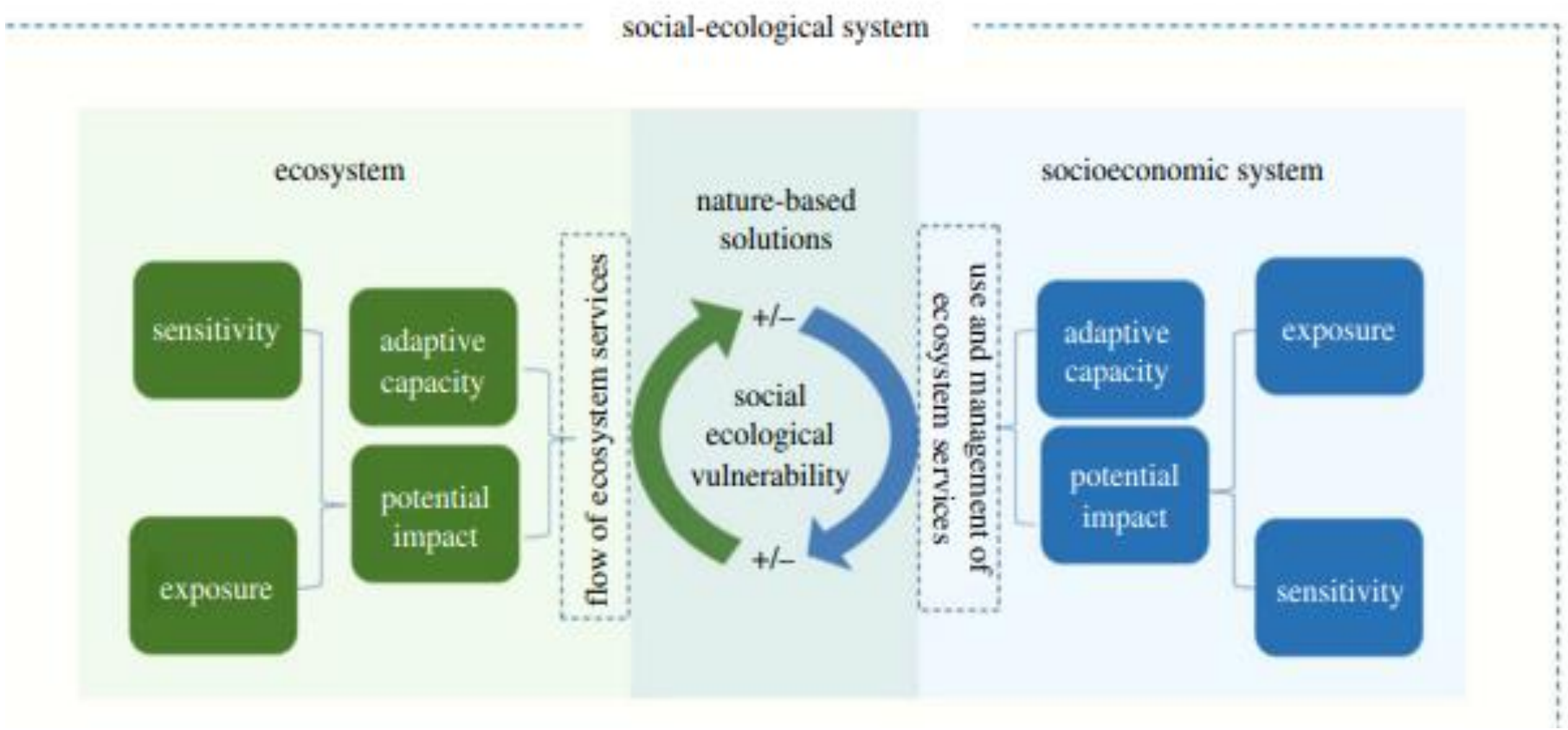
Maintaining the health of the ecosystems are critically important

NBS can address climate and biodiversity crisis while also contributing to SDG

It can provide more than a third of the climate change mitigation needed to reach goals to curb global warming by 2030 restoring 350 million ha of land

It can also create addition 9 trillion USD to economy

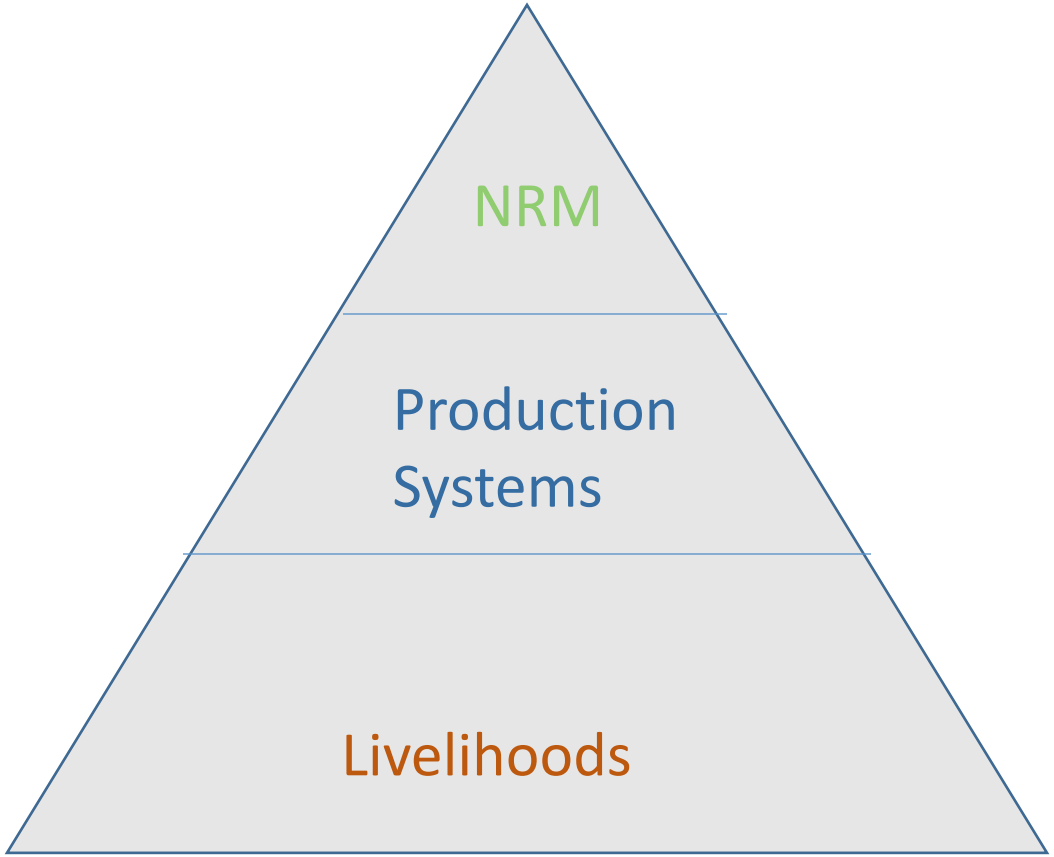
Integration of NBS to socio-ecological vulnerability



Source:

Seddon N, Chausson A, Berry P, Girardin CAJ, Smith A, Turner B. 2020 Understanding the value and limits of nature-based solutions to climate change and other global challenges. Phil. Trans. R. Soc. B 375: 20190120. http://dx.doi.org/10.1098/rstb.2019.012

Scope of NBS applications



NBS can be paired with any of the 17 Sustainable development goals

It reduces exposer and sensitivity while also building adaptive capacity

huge potential to address both causes and consequences of climate change

Key Constraints

Difficulties in measuring effectiveness

How cost effective are NBS in both short and long term

Problems in valuation

Lack of investment

Governance Challenges

How to integrate various science discipline together in a common approach ?

Thank You