



RAPPORTO FRA AGROECOLOGIA E SALUTE

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The creation of a healthy food environment which makes the healthy and sustainable choice the easy choice.



It is estimated that in the EU in **2017** over **950,000** deaths were attributable to unhealthy diets (one out of five).



A healthy and plant based diet reduces the risk of life threatening diseases and the environmental impact of our food system.



Research and innovation

EUR 10 billion under Horizon Europe to be invested in R&I related to food, bioeconomy, natural resources, agriculture, fisheries, aquaculture and environment. Knowledge transfer will be essential. The CAP's Farm advisory services and Farm sustainability data network will be instrumental in assisting farmers in the transition.



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**COMUNICAZIONE DELLA COMMISSIONE AL PARLAMENTO EUROPEO,
AL CONSIGLIO, AL COMITATO ECONOMICO E SOCIALE EUROPEO E
AL COMITATO DELLE REGIONI**

**Una strategia "Dal produttore al consumatore"
per un sistema alimentare equo, sano e rispettoso dell'ambiente**





Una **missione nel settore della salute del suolo e dell'alimentazione** mirerà a sviluppare soluzioni per ripristinare la salute del suolo e le sue funzioni. Le nuove conoscenze e innovazioni potenzieranno inoltre gli approcci agroecologici nella produzione primaria attraverso un partenariato specifico sui laboratori viventi (*living labs*) di **agroecologia**. Ciò contribuirà a ridurre l'uso di pesticidi, fertilizzanti e antimicrobici. Per accelerare l'innovazione e il trasferimento delle conoscenze, la Commissione collaborerà con gli Stati membri per rafforzare il ruolo del **partenariato europeo per l'innovazione "Produttività e sostenibilità dell'agricoltura"**



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Strategia dell'UE sulla biodiversità per il 2030

Riportare la natura nella nostra vita

Una migliore protezione degli ecosistemi naturali, unita agli sforzi per ridurre il commercio e il consumo di specie selvatiche, contribuirà anche a prevenire l'insorgere di malattie e pandemie e rafforzare la resilienza alle stesse. L'UE aumenterà il sostegno agli sforzi da compiere a livello mondiale per applicare l'approccio "One **Health**"⁸³, che riconosce il nesso intrinseco tra la salute umana, la salute degli animali e una natura integra e resiliente.



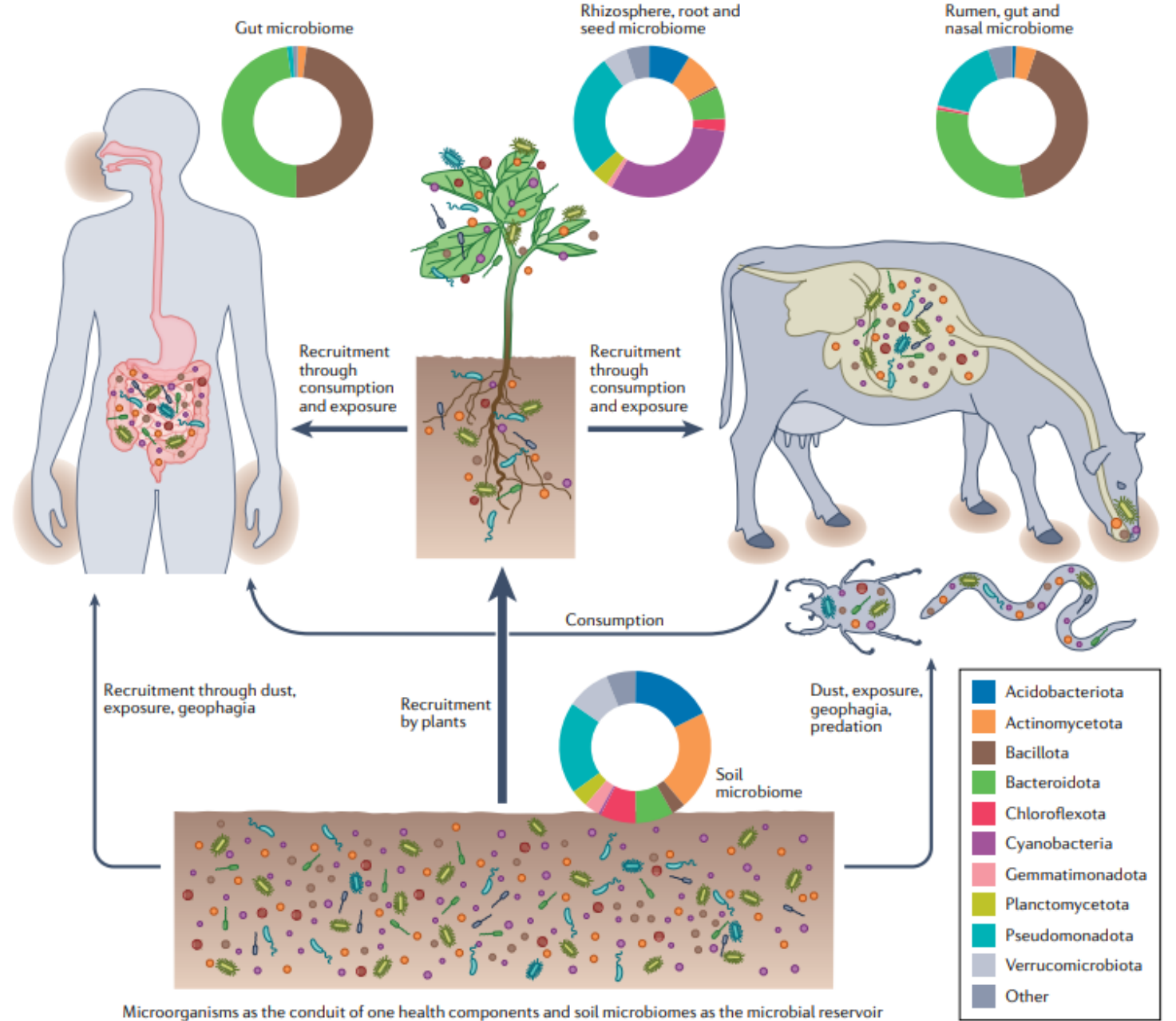
REVIEWS

Soil microbiomes and one health

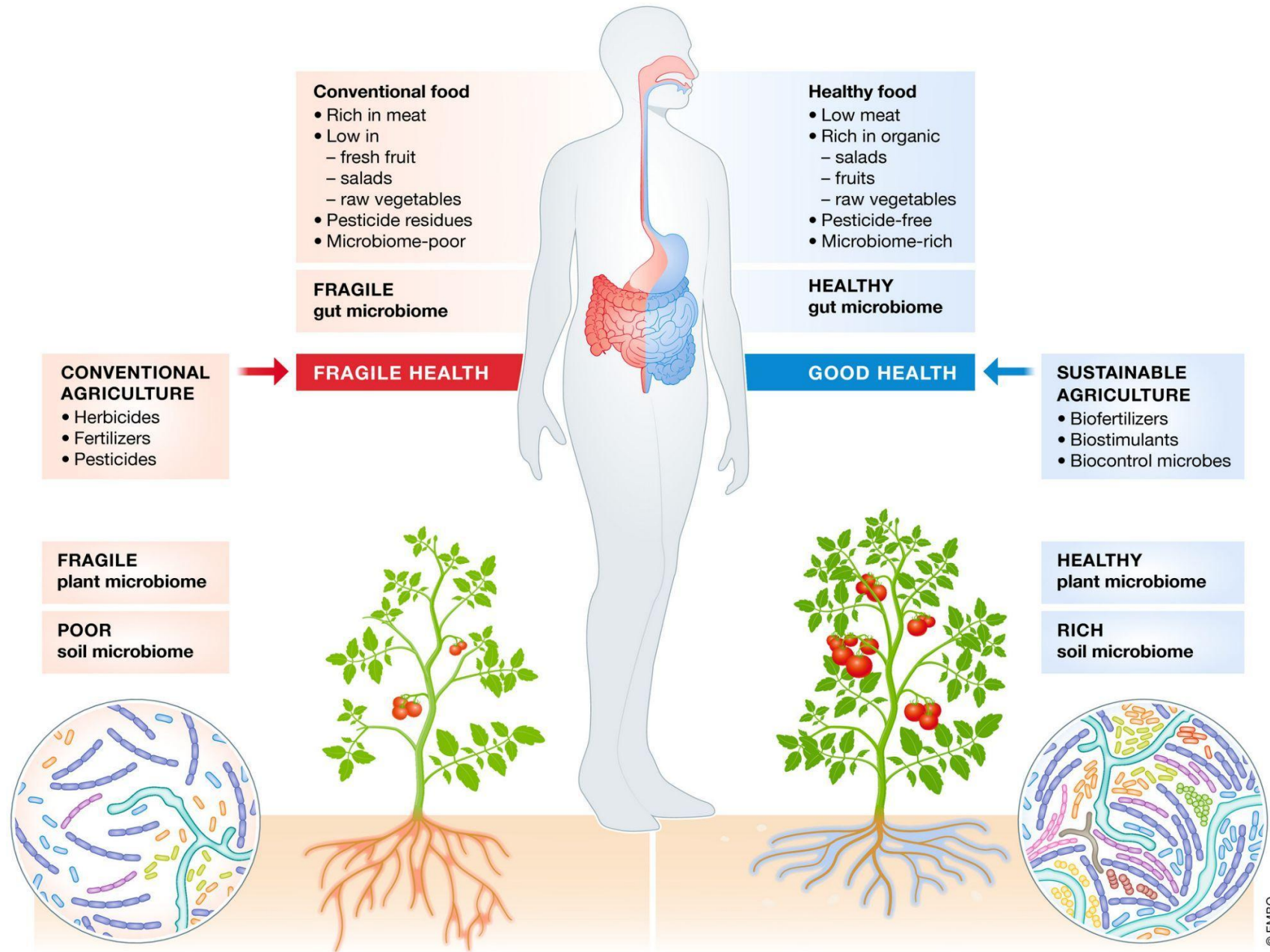
Samiran Banerjee¹ and Marcel G. A. van der Heijden^{2,5}

Abstract | The concept of one health highlights that human health is not isolated but connected to the health of animals, plants and environments. In this Review, we demonstrate that soils are a cornerstone of one health and serve as a source and reservoir of pathogens, beneficial microorganisms and the overall microbial diversity in a wide range of organisms and ecosystems. We list more than 40 soil microbiome functions that either directly or indirectly contribute to soil, plant, animal and human health. We identify microorganisms that are shared between different one health compartments and show that soil, plant and human microbiomes are perhaps more interconnected than previously thought. Our Review further evaluates soil microbial contributions to one health in the light of dysbiosis and global change and demonstrates that microbial diversity is generally positively associated with one health. Finally, we present future challenges in one health research and formulate recommendations for practice and evaluation.

Check for updates



Microorganisms as the conduit of one health components and soil microbiomes as the microbial reservoir



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Review article

Soil biota, antimicrobial resistance and planetary health

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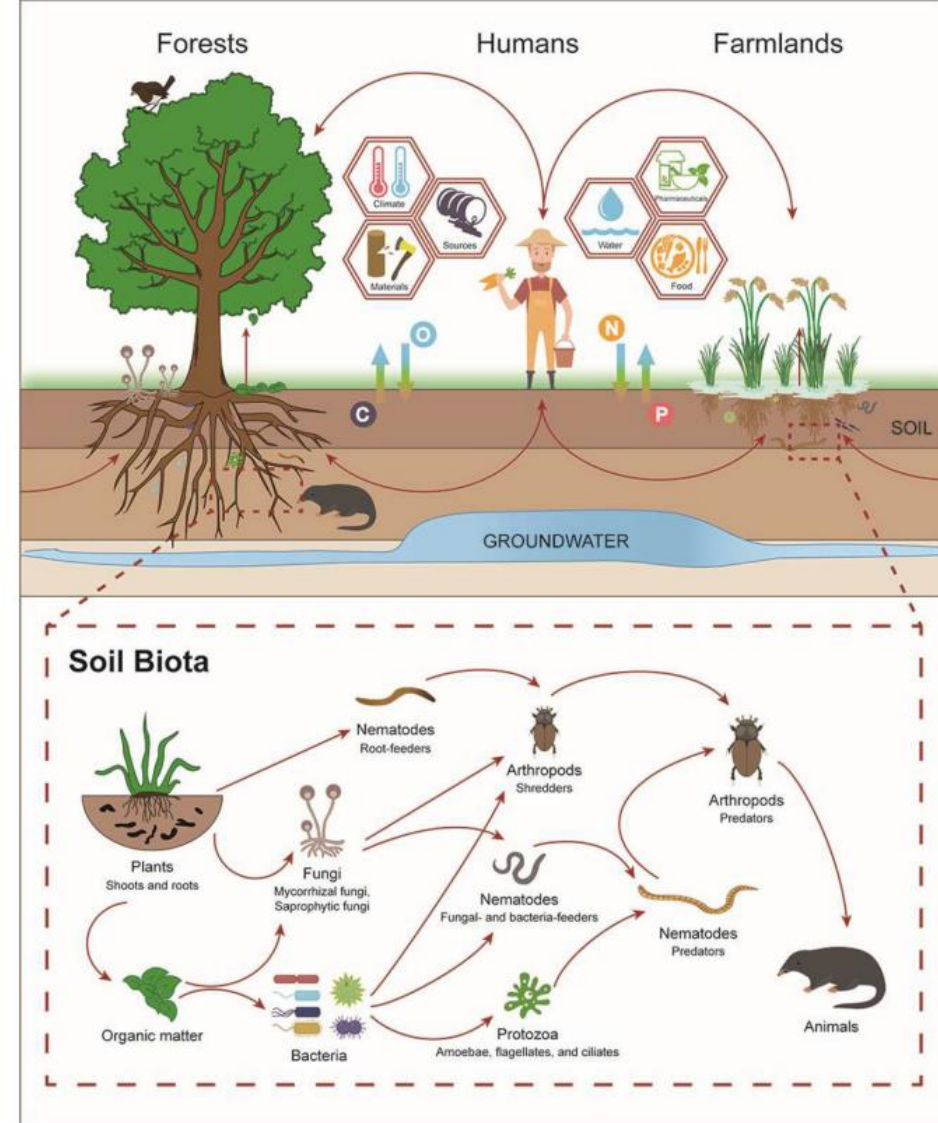


Fig. 1. The role of soil biota in supporting the planetary health system. Soil biota constitutes a complex food web, through which soil offers an array of ecosystem services to human, thus safeguarding planetary health.



Resistenza agli antibiotici

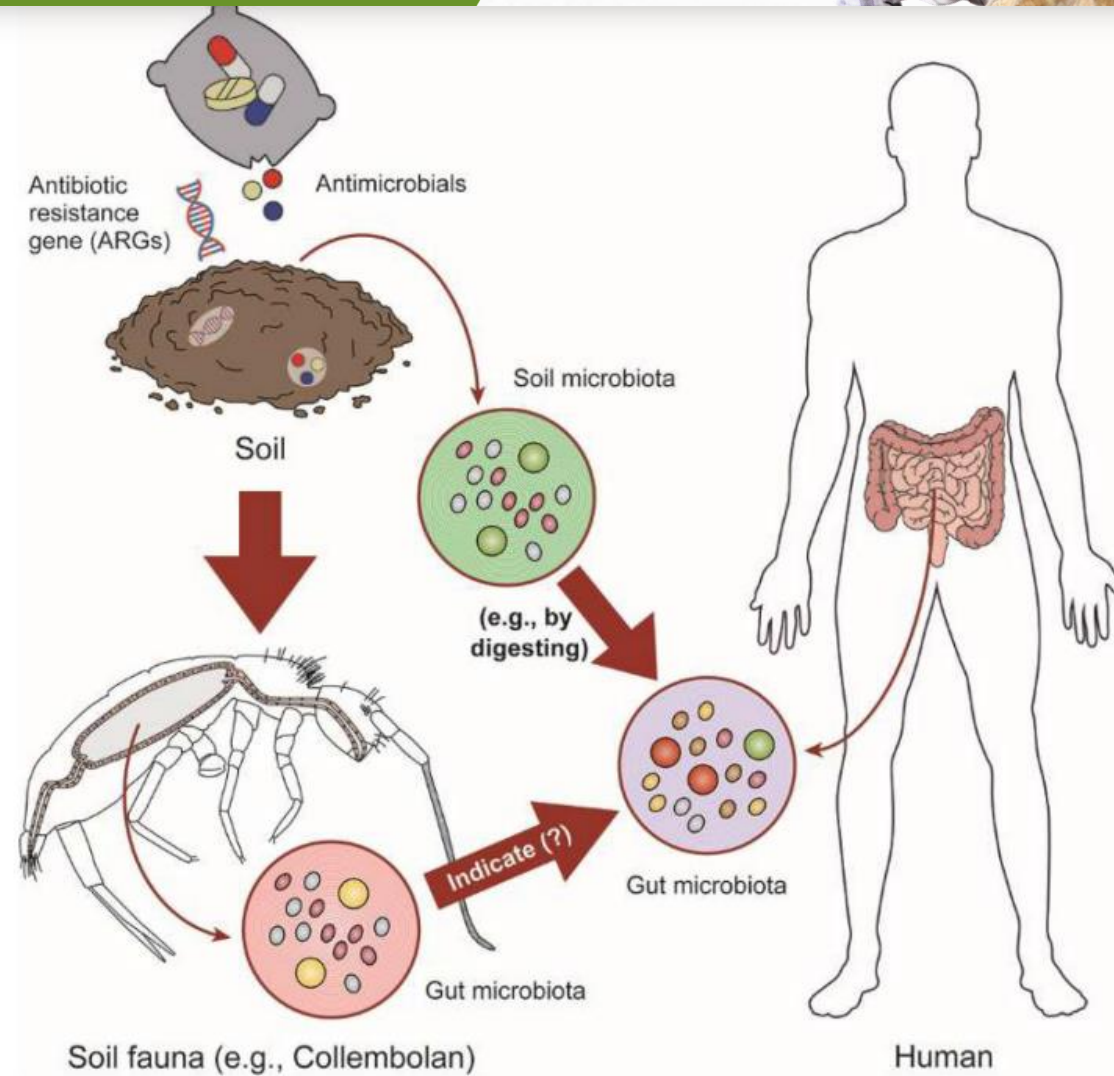


Fig. 3. Antimicrobials and antimicrobial resistance in the gut microbiomes of soil fauna are linked to human microbiome.



Adverse impacts from human-caused climate change will continue to intensify

a) Observed widespread and substantial impacts and related losses and damages attributed to climate change

Water availability and food production

Physical water availability	Agriculture/crop production	Animal and livestock health and productivity	Fisheries yields and aquaculture production

Health and well-being

Infectious diseases	Heat, malnutrition and harm from wildfire	Mental health	Displacement

Cities, settlements and infrastructure

Inland flooding and associated damages	Flood/storm induced damages in coastal areas	Damages to infrastructure	Damages to key economic sectors

Biodiversity and ecosystems

Terrestrial ecosystems	Freshwater ecosystems	Ocean ecosystems

Includes changes in ecosystem structure, species ranges and seasonal timing

Key

Observed increase in climate impacts to human systems and ecosystems assessed at **global level**

- Adverse impacts
- Adverse and positive impacts
- Climate-driven changes observed, no global assessment of impact direction

Confidence in attribution to climate change

- High or very high confidence
- Medium confidence
- Low confidence

