

Visions for nature and nature's contributions to people for the 21st century

Report from an IPBES visioning workshop held on 4-8 September 2017 in Auckland, New Zealand



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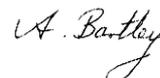
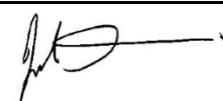
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Executive Summary

- Existing scenarios of biodiversity and ecosystem services (BES) have important limitations and gaps that constrain their usefulness for the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES). Specifically, they fail to incorporate policy objectives related to nature conservation and social-ecological feedbacks, they do not address the linkages between biodiversity and ecosystem services, and they are typically relevant at only a particular spatial scale. In addition, nature and its benefits are treated as the consequence of human decisions, but are not at the centre of the analysis. To address these issues, **the IPBES Scenarios and Models Expert Group initiated the development of a set of Multiscale Scenarios for Nature Futures based on positive visions for human relationships with nature.**
- The first step of this process was a visioning workshop with stakeholders and experts** on 4-8 September 2017 in Auckland, New Zealand. A total of 73 participants from inter-governmental organisations, national government organisations, non-governmental organisations, academia and the private sector, from 31 countries, and with a range of sectoral expertise on biodiversity topics, from urban development to agriculture to fisheries, worked together in a visioning exercise. This report documents the results from this visioning workshop to inform further stakeholder consultation and the development of the associated multiscale scenarios by modelers and experts.
- This creative visioning exercise was carried out in four steps based on a suite of participatory methods that were used to develop visions of alternative futures (Figure 1).** First the participants identified important themes to develop the visions. Next, thematic groups identified the main trends for BES in each theme and a set of “Seeds” of emerging initiatives leading to positive futures for our relationship with nature. Implications of what would happen across a range of sectors were identified for each seed. Then a pathway analysis of how the current regime in each theme may be transformed into the future desirable regime was carried out. Narratives were then built for the visions emerging from each group. Finally, commonalities of visions across the groups were identified, and the regional relevance of each vision for different parts of the world was assessed.

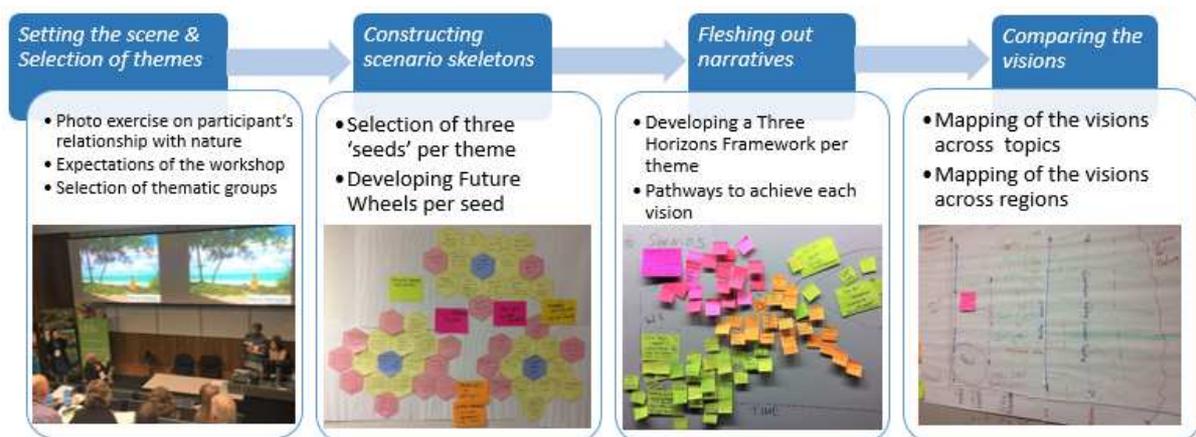


Figure 1. Steps in the development of the stakeholder visions

- Seven thematic groups emerged, with most groups developing a single vision. The visions were the following (Figure 2):
 - Nature-based Inclusive Prosperity:** A healthy world, where wealth and wellbeing is accessed fairly and natural resources sustain richly diverse cultures, societies and nature into the future. This would be achieved through a recharacterisation of gross domestic product (GDP) “growth” to ensure it is connected to well-being and nature;

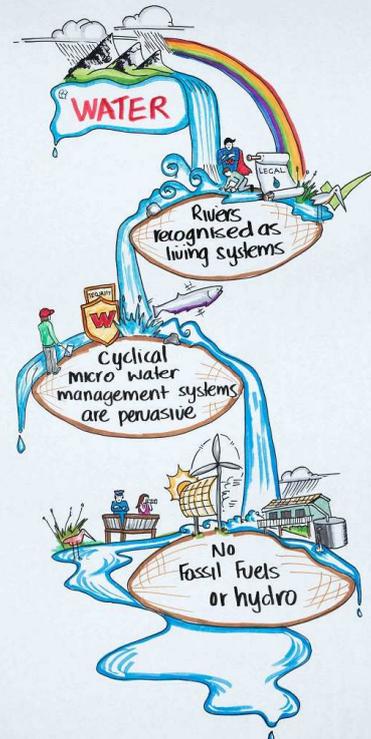
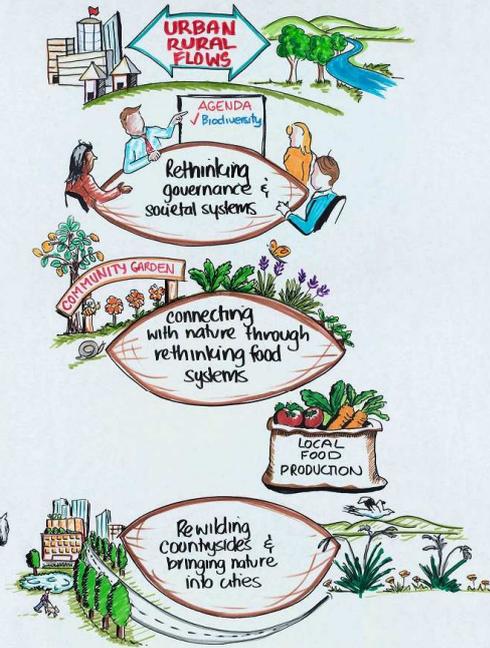
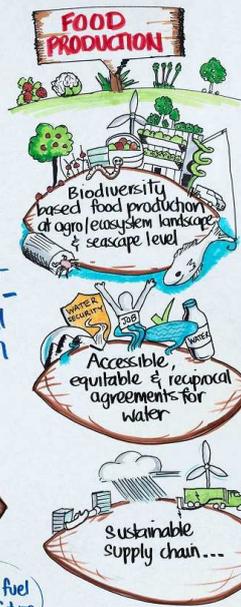
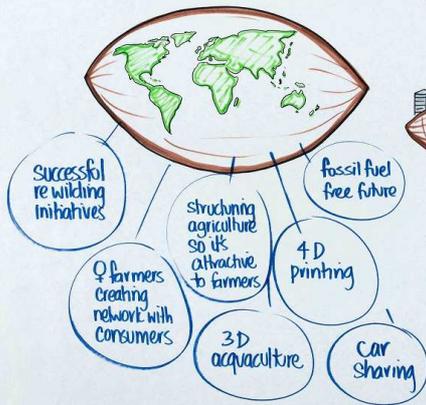
international resource use taxation schemes which incentivise sustainable resource use; in-country development plans with ecological objectives and institutional mechanisms which support community-based economies and natural resource management.

- **Sustainable Food Systems:** a world without hunger based on a combination of sustainable supply chains between producers, traders, transporters and retailers, grounded on biodiversity-based food production at landscape and seascape levels, and supported by reciprocal agreements for sharing benefits, i.e., water and genetic materials.
- **ReFooding and ReWilding the Urban Rural Flows:** a world where urban and rural dwellers reconnect with nature, reconcile their interests and assist each other in improving quality of life in the cities and valuing the countryside. Enhanced urban rural flows is achieved by improving governance systems and a locally-contingent mix of ReFooding, i.e., localized ecosystem service flows in cultural landscapes, and ReWilding, i.e., high-tech and global solutions to free up space for nature in the countryside and the cities.
- **Healthy Social-Ecological Freshwater Systems:** a world where rivers are awarded legal rights as living systems, water use and extraction are done efficiently at the micro-scale in a circular economy paradigm with no waste-water, and a shift occurs from hydroelectric to other renewable energy systems, also at the micro-scale and decentralised.
- **A Tasty World with Values:** a world where human-nature relations are based on reciprocity, harmony and relationality supported by educational systems infused by these values; food is predominantly produced in bio-culturally diverse and autonomous local food systems, strong cultural institutions ensure respectful sharing among diverse knowledge systems and governance systems share universal recognition of local small producers and indigenous peoples' sovereignty over territories, resources and knowledge.
- **Dancing with Nature:** a world in which nature is given space to thrive. Nature is connected and changing at multiple scales. Dancing with Nature requires dynamic people, infrastructure, and civilizations. In this world, human societies build, live and work to accommodate and benefit from natural fluctuations, while using technology to enable people and nature to adapt to the challenges of the Anthropocene.
- **Healthy Oceans, Happy Communities:** a world where the oceans and coasts are full of life, ecosystem services are sustained through the adoption of long-term sustainability strategies by governments and businesses (+500-year strategies) and the high-seas are closed to fishing. Local communities are involved in the sustainable management of coastal zones, and new technologies are developed to feed populations who also change their diets to decrease impacts on oceans.

in our groups,
we identified
3 SEEDS
that can contribute
to our thematic area

SEEDS
exist now but
are marginal -
not widespread
or well known

EXAMPLES:



ARTWORK: REFLECTINGGRAPHICS.COM and EMPHASISE.NZ

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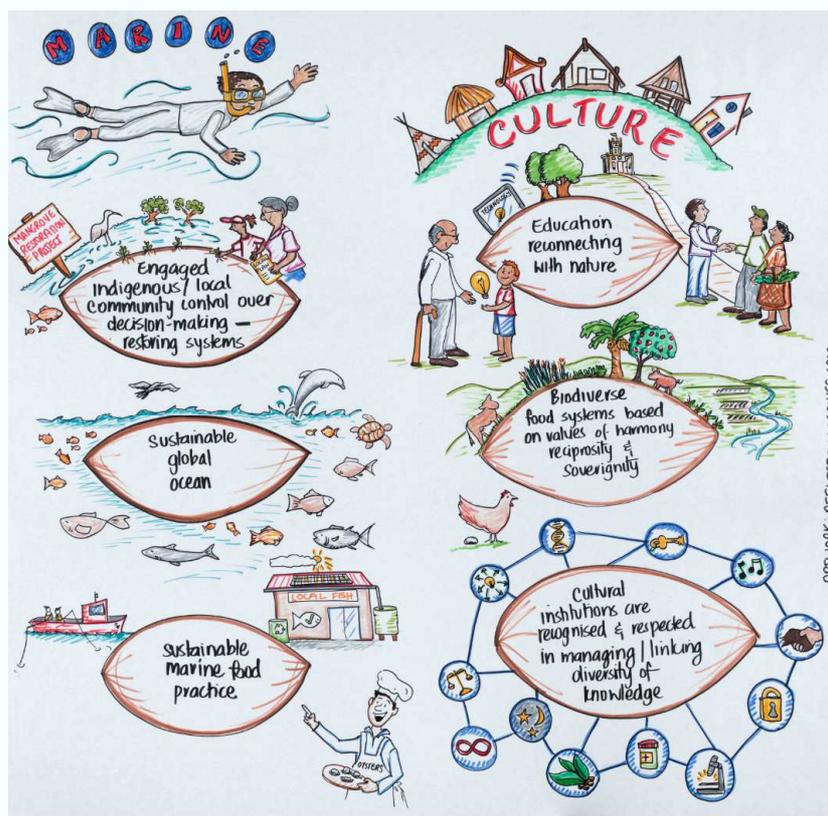


Figure 2. The three seeds for each thematic group (Source: Dave Leigh, Emphasise Ltd.; Mary Brake, Reflection Graphics; Pepper Lindgren-Streicher, Pepper Curry Design). Groups correspond to the following visions: Food Production = Sustainable Food Systems, Urban Rural Flows = ReWilding and ReFooding the Urban Rural Flows, Prosperity = Nature based Inclusive Prosperity, Nature Dynamics = Dancing with Nature, Water = Healthy Social-Ecological Freshwater Systems, Marine = Healthy Oceans, Happy Communities, Culture = A Tasty World with Values.

- Common themes on **preferences for the future of our relationship with nature** emerged across the visions. Some visions emphasize the **indirect and intangible benefits** of biodiversity, such as in *ReWilding the Urban Rural Flows*, *Dancing with Nature*, and *A Tasty World with Values*, while others emphasize the **direct uses of nature**, such as in the *ReFooding* and *Sustainable Food Systems*. **Localisation of ecosystem service flows** and the development of multifunctional landscapes is an important component of *ReFooding the Urban Rural Flows*, *Healthy Social-Ecological Freshwater Ecosystems*, *A Tasty World with Values*, and *Nature-based Inclusive Prosperity*, while others emphasize the **management of global ecosystem service flows** or the segregation of spatial uses of ecosystems, such as *ReWilding the Urban Rural Flows*, *Dancing with Nature*, and *Healthy Oceans*, *Happy Communities*. Other themes emerging from a cross-cutting analysis include the **appreciation of specific elements of biodiversity** or a more **holistic appreciation of biodiversity**, varying degrees of the use of **technology to improve nature benefits**, and varying **intensities of nature management**. Shared themes across multiple visions include green infrastructure, a circular economy, context-dependent learning to inform environmental governance, and the equalisation and reduction of humanity's global footprint. Several visions, e.g., *A Tasty World with Values*, require a societal paradigm shift and significant changes in values.
- These visions differ conceptually from traditional scenarios** that are used in environmental management, with the emphasis on nature and nature's benefits to people, and in visioning solely positive futures. These visions also allow for the inclusion of **dynamic processes and**

feedbacks between humans and nature that are missing in current scenarios, e.g., **changes in socio-cultural values and changes in practices** and concrete strategies for how such changes would come about, inclusion of qualitative values e.g., sense of place, **distribution of stakeholders' preferences**, teleconnections, and the **complexity of biodiversity change** (including aspects such as invasive and endemic species, and spatial scale).

- The visions identified in the workshop do not represent all possible positive future visions; rather, this workshop was just the first step in a 4-year process of developing Multiscale Scenarios for Nature Futures. This process involves iterative cycles of **visioning**, **stakeholder consultation**, and **modelling** (Figure 3). The current set of visions needs now to be consolidated, eventually into a smaller set of visions, through **global, regional and local consultations** during 2018. We envision using **fora such as meetings related to the Convention on Biological Diversity, the Future Earth Network, the Natural Capital Coalition, the High-level Political Forum on Sustainable Development** among others to refine the visions and develop the scenarios. Modelling groups and expert teams will then develop scenarios for each of the visions, that will lead to a new round of storyline development and visioning. It is likely that gaps in visions (i.e., alternative futures that were not identified at the Auckland workshop) will be identified and additional visions will be incorporated into further iterations of the Multiscale Scenarios for Nature Futures. The IPBES expert group on scenarios and models will guide this process up to the end of 2019, when its mandate ends. Scenario development will then continue under the leadership of a consortium of institutes, that will be duly initiated.

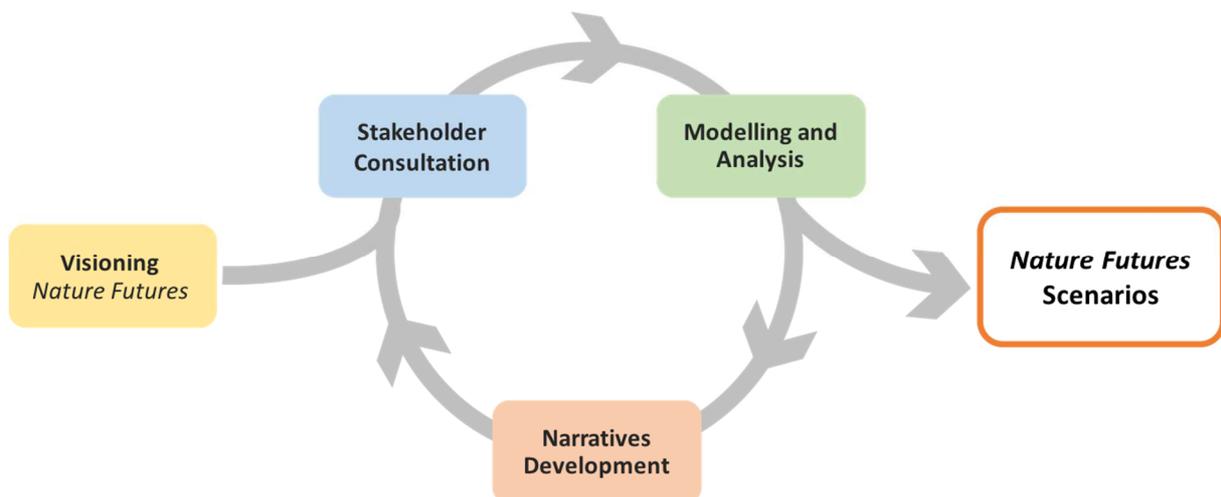


Figure 3. Iterative process for Nature Futures Scenarios development.

- **The process of iterating multiscale scenarios for nature futures requires substantial ongoing efforts and funding, and capacity building** both within and aligned with the IPBES Work Programme. The development of the multiscale scenarios for nature futures needs to **link both to ongoing work on both global scenarios** connected to IPCC and UNEP GEO processes and to **business and government scenarios**, as well as inform the increasing number of local, national and regional social-ecological scenarios. Further efforts will be made to engage and coordinate with diverse platforms already involved in local/regional participatory scenarios development. One funding call of direct relevance to this work, the BiodiveERsA/Belmont Forum call, has been put forward and will provide substantial support toward developing Nature Futures scenarios. However, the geographic limitations of this call suggest that other funding opportunities are required to fulfil the regional geographic representation called for by the Multiscale Scenarios for Nature Futures, and to better coordinate the rapid growth in national and regional scenario approaches.