NATIONAL
ECOSYSTEM
ASSESSMENT
INITIATIVE

UN environment programme

WCMC

WORKSHOPS SCENARIOS AND POLICY

- NATIONAL ECOSYSTEM ASSESSMENT INITIATIVE -

@Nikola Majksner on Unsplash

BESNet
Biodiversity and Ecosystem Services Network

Supported by:
Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety
based on a decision of the German Bundestag

HOUSEKEEPING

Recording: This workshop will be recorded and will be uploaded to our NEA Initiative website. If you have any issues with this, please let us know.

Microphone and Camera: Your microphone will be muted throughout the workshop.

Questions: If you would like to comment or ask a question during the Q&A session, please raise your hand or type it in the chat function accessible from the bottom of your screen.

Support: If you have any technical issues, please send a direct message to [Technical Support – Alexandra Garcia] via the chat.

Workshop Agenda

- Introducing methods for developing pathways from the scenarios to specific policies and actions
- Questions and answer session

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Scenarios for decision-making

Dr Laura Pereira – Scenarios and models expert,
IPBES Task Force

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Good morning

- While we wait for everyone to join us, please can you in the meantime go to www.menti.com and type in the code:

- Or click the link: https://www.menti.com/agcmnyi9j4

- We will start the session with a group poll using this link

Scenarios for decision making

Laura Pereira
(with thanks to Joost Vervoort for the use of many of his slides)
Associate Professor
Global Change Institute, Wits University

January 2022

CGIAR RESEARCH PROGRAM ON Climate Change, Agriculture and Food Security CCAFS

Stockholm Resilience Centre
Sustainability Science for Biosphere Stewardship
Stockholm University

GLOBAL CHANGE Institute
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Take home message:
Beyond prediction

- Short-term trends may be predicted in some cases, but **extreme events** may not
- Mid- and long-term developments are contingent on many **interacting factors**
- Prediction is a nearly impossible, **dangerous** proposition

Scenarios

- Scenarios are multiple **possible** futures
- **What-if** stories about the future, can be told in words, numbers, images…
- Scenarios explore crucial future uncertainties – **context**!
- **Not** predictions - complex systems thinking

North Korea-US tensions: seven potential scenarios

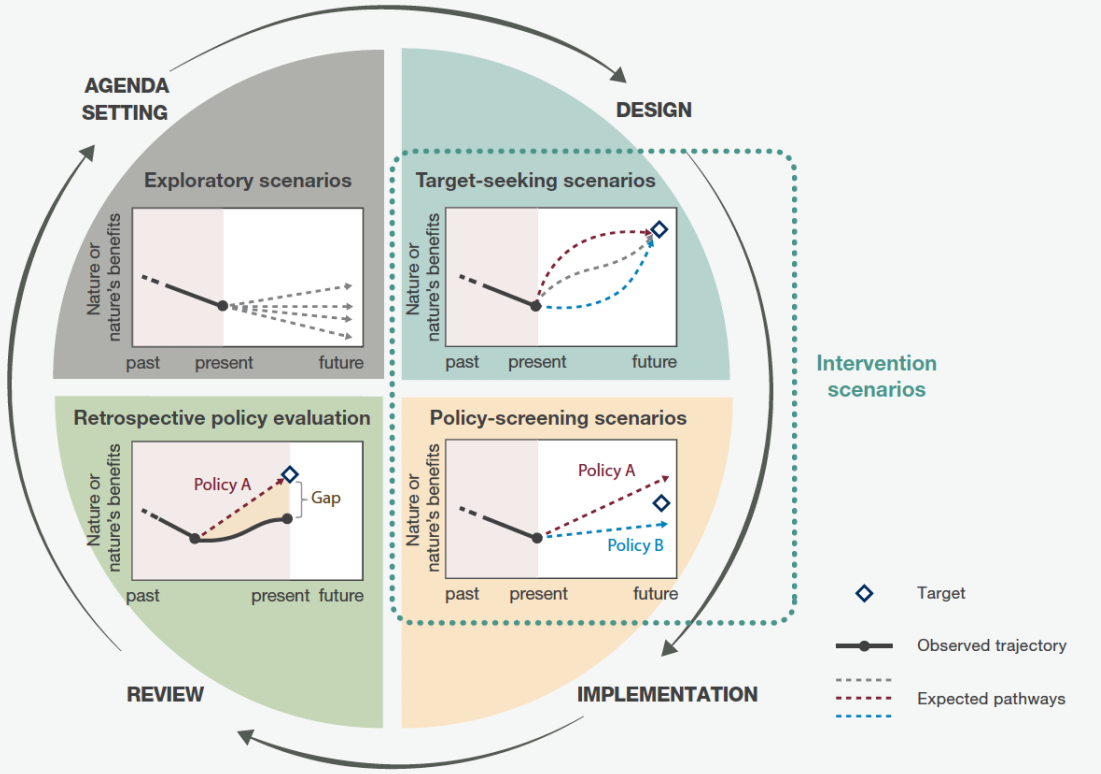
Donald Trump has warned North Korea with 'fire and fury' and Kim Jong-un has threatened to attack Guam. How could this play out?

- Explainer: where is Guam and why is North Korea threatening it?
- Analysis: how likely is war?

Many different types of scenarios for policy-making (IPBES 2016)

FIGURE **SPM. 2**

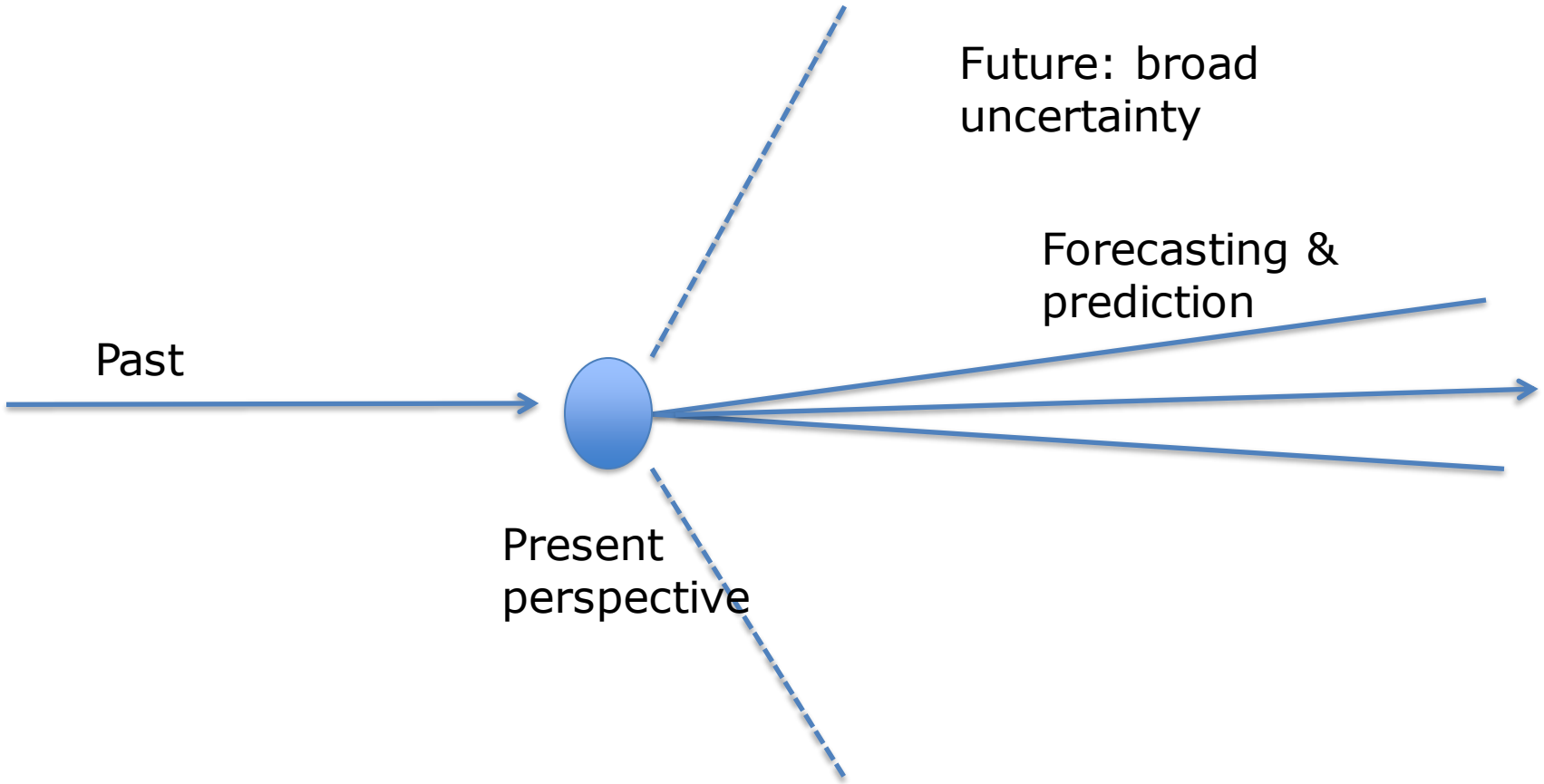
This figure shows the roles played by different types of scenarios corresponding to the major phases of the policy cycle. Types of scenarios are illustrated by graphs of changes in nature and nature's benefits over time. The four major phases of the policy cycle are indicated by the labels and grey arrows outside the coloured quarters of the circle. In "exploratory scenarios", the dashed lines represent different plausible futures, often based on storylines. In "target-seeking scenarios" (also known as "normative scenarios"), the diamond represents an agreed-upon future target and the coloured dashed lines indicate scenarios that provide alternative pathways for reaching this target. In "policy-screening scenarios" (also known as "ex-ante scenarios"), the dashed lines represent various policy options under consideration. In "retrospective policy evaluation" (also known as "ex-post evaluation"), the observed trajectory of a policy implemented in the past (solid black line) is compared to scenarios that would have achieved the intended target (dashed line).



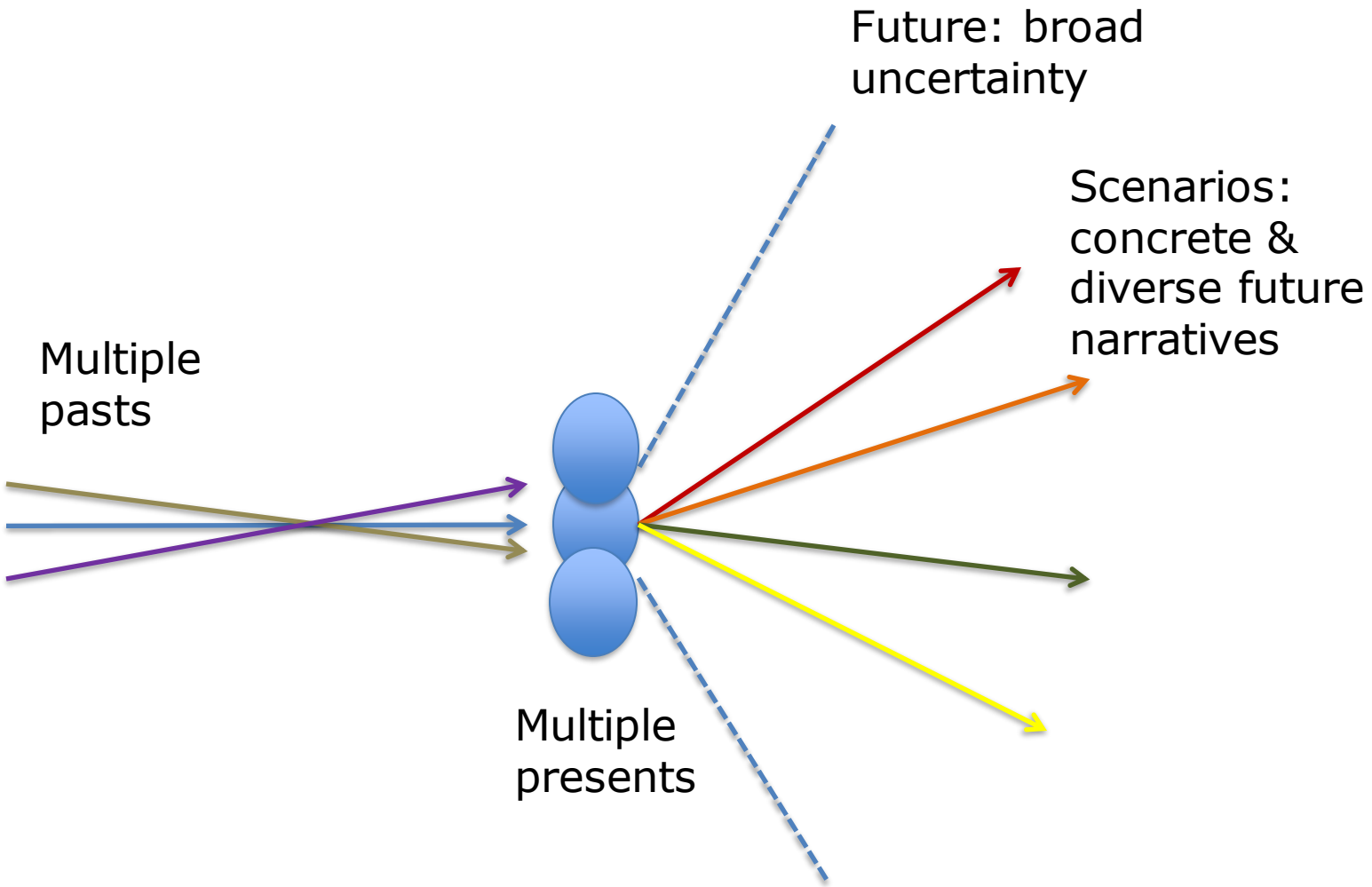
Origin of scenarios

- Originated in the military
- Developed by think tanks and large corporations (e.g. Shell)
- Used in quantitative research, e.g. modeling
- Multi-stakeholder settings: scenarios have many different functions
- Used in many fields, many different methods

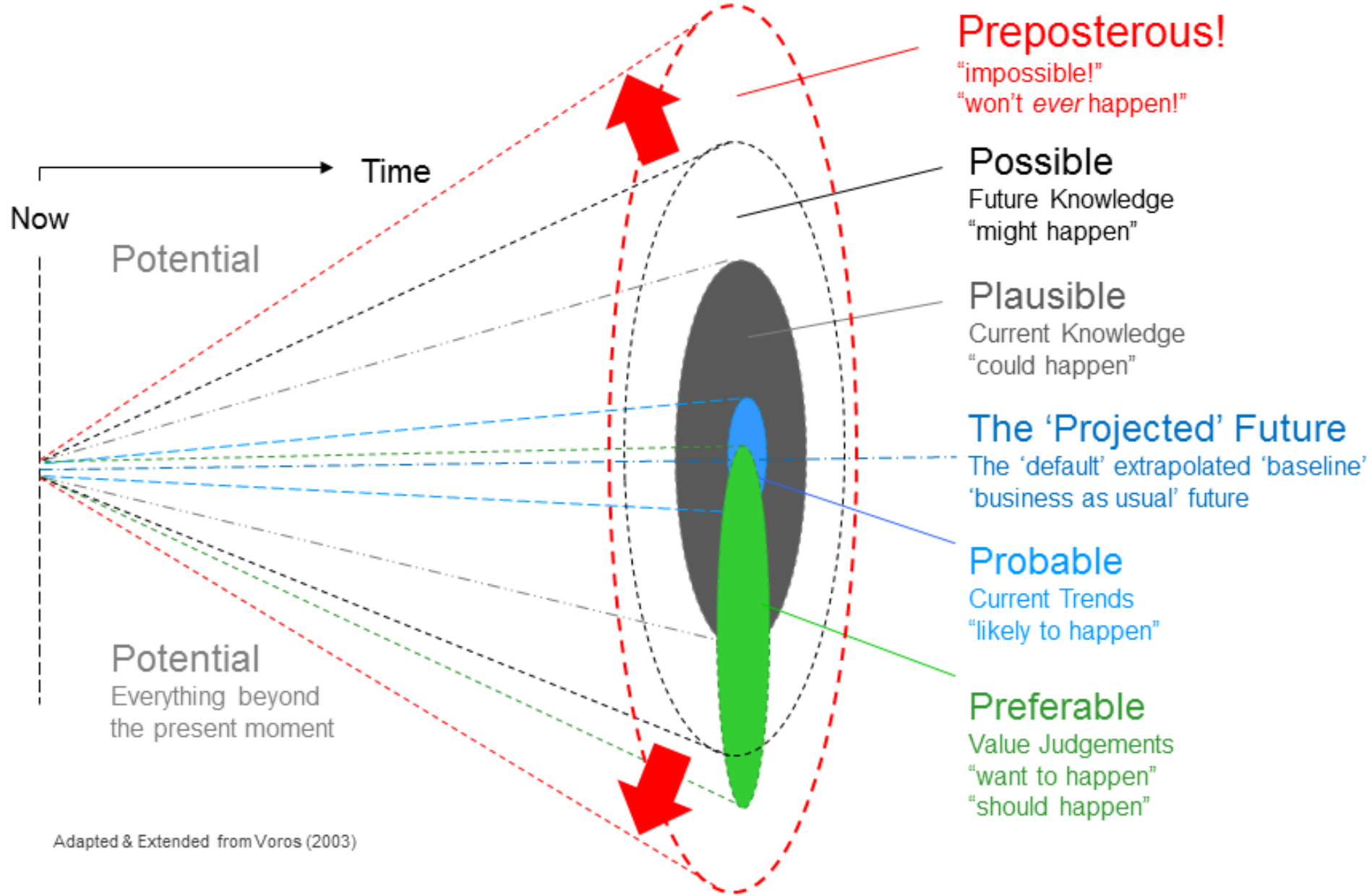
(Wilkinson 2008, van Notten 2003)



"Conventional" ways of thinking about the past, present and future



More “Realistic” way to think about the past, present and future

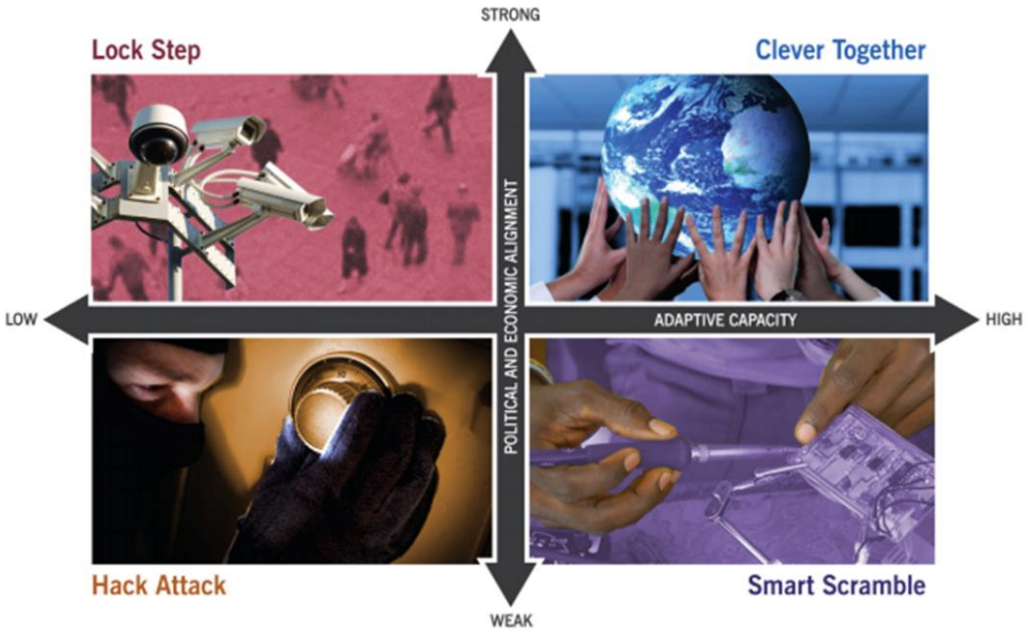


Source: https://thevoroscope.com/2017/02/24/the-futures-cone-use-and-history/

Scenarios approach: two axes

- Highly accessible and transparent; it has proven its worth in many scenario processes- especially for **quantitative analysis**

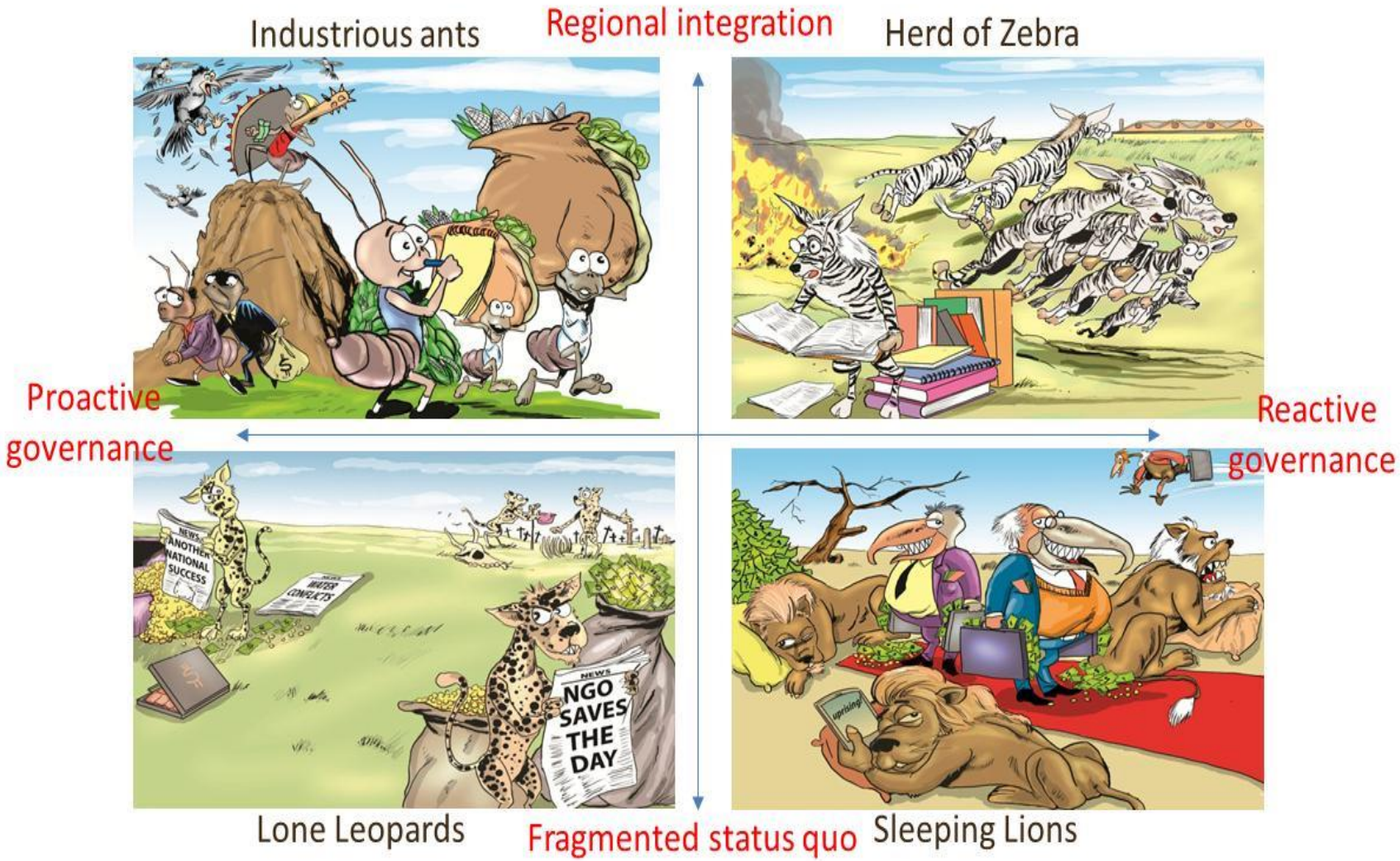
- Limitations – most notably, that the set of futures that is being explored is dominated by just two drivers of change.



Rockefeller Foundation's scenario report on technology and development

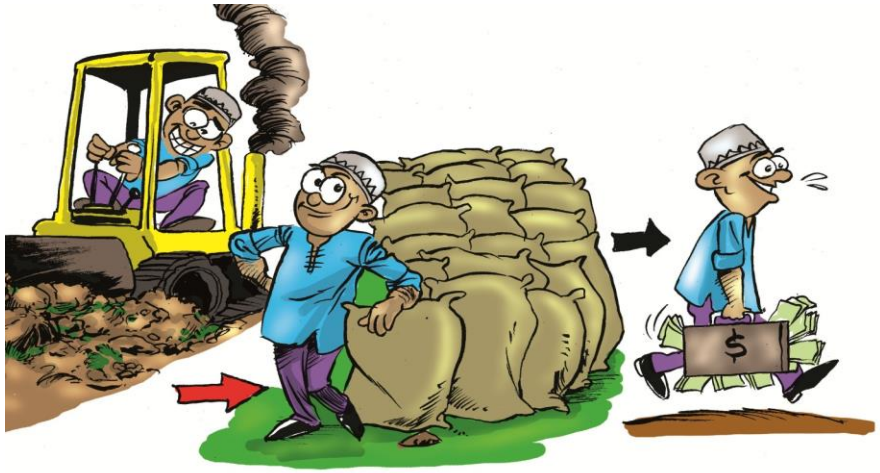
Universiteit Utrecht

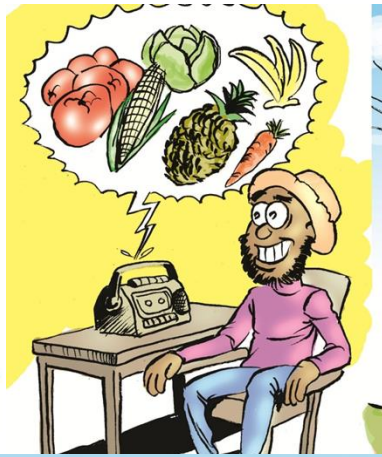
East Africa: four socio-economic scenarios



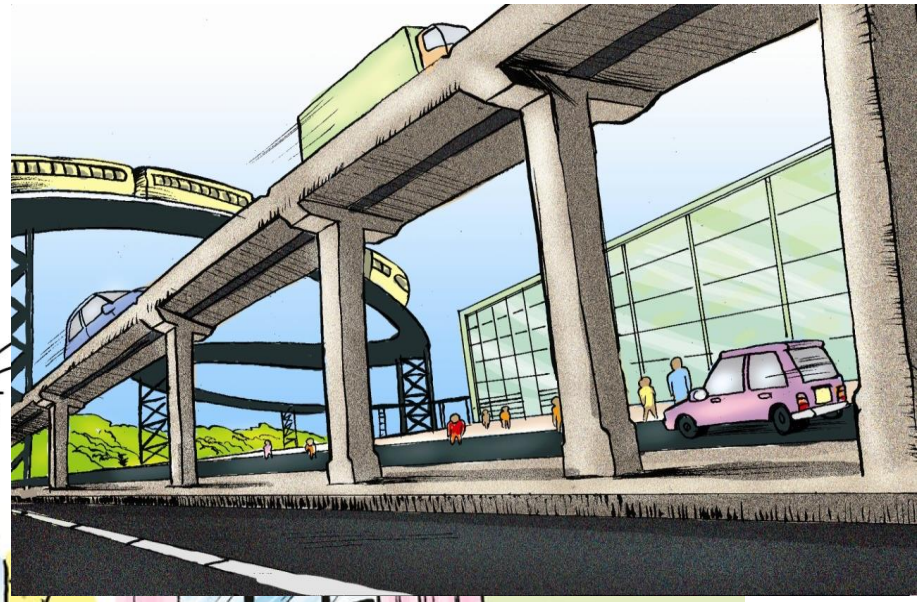
Images help us to tell stories about the future

Merrie et al 2018

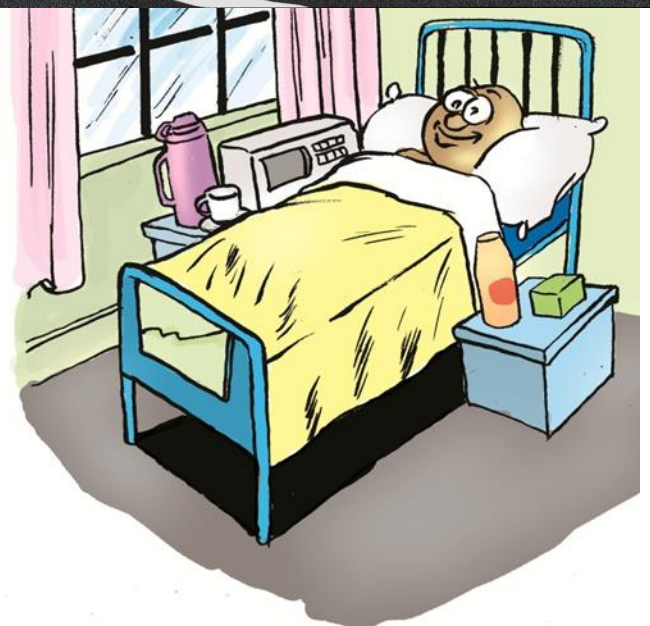




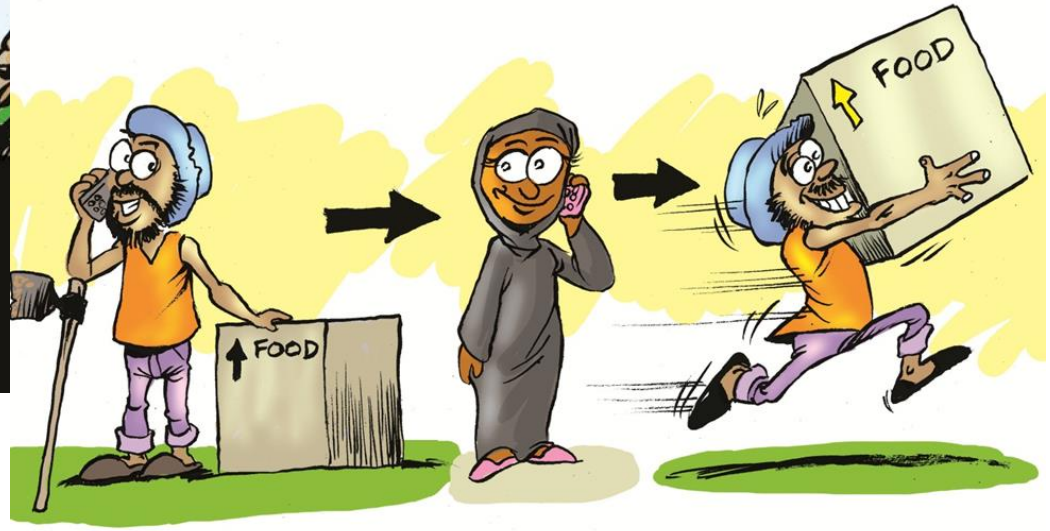
Industrious Ants



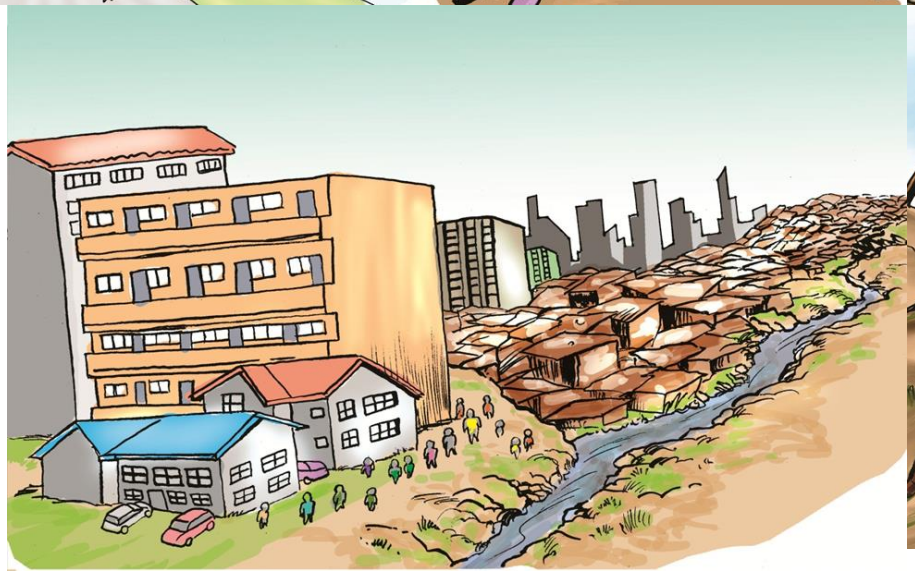
Herd of Zebra



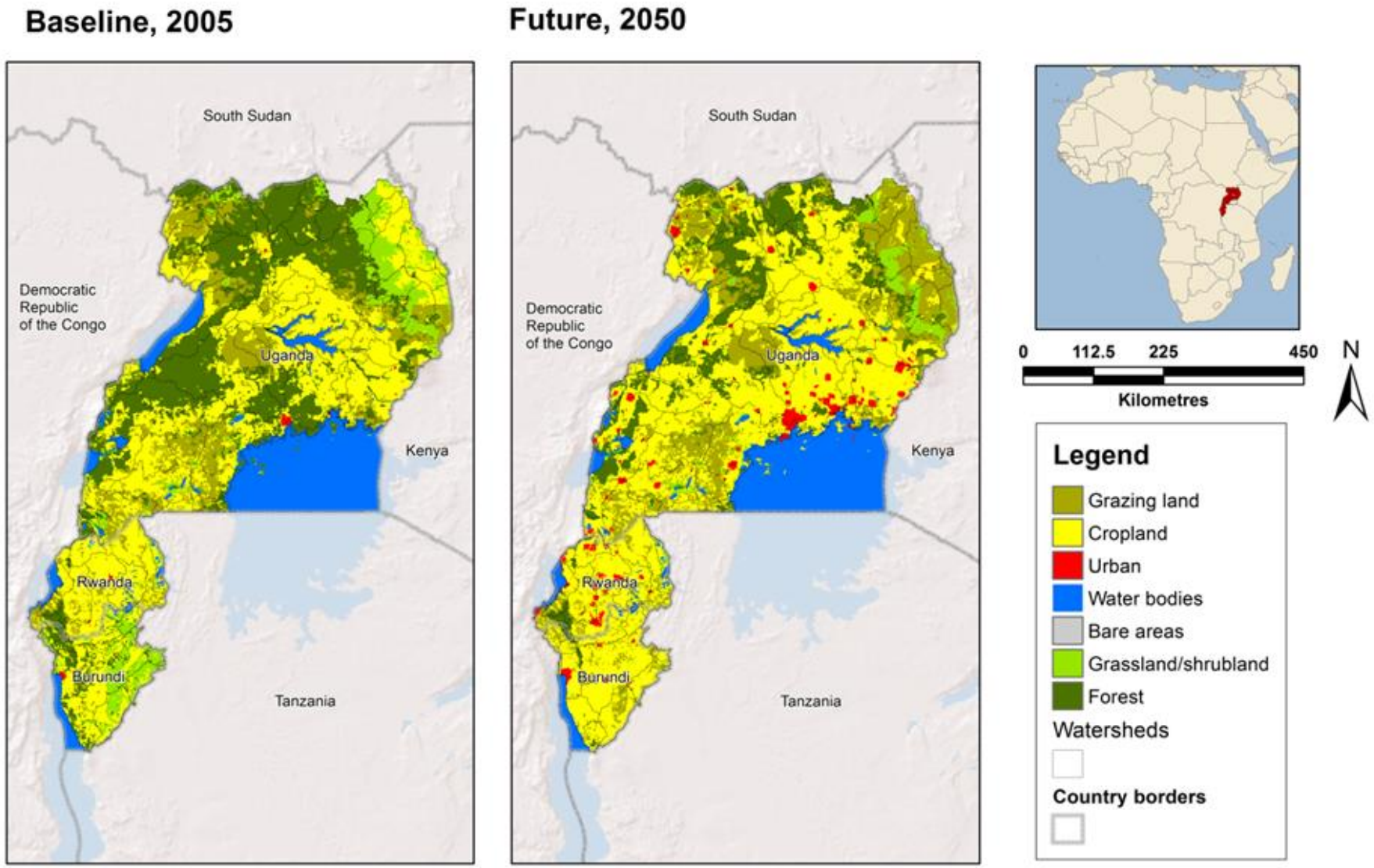
Lone Leopards



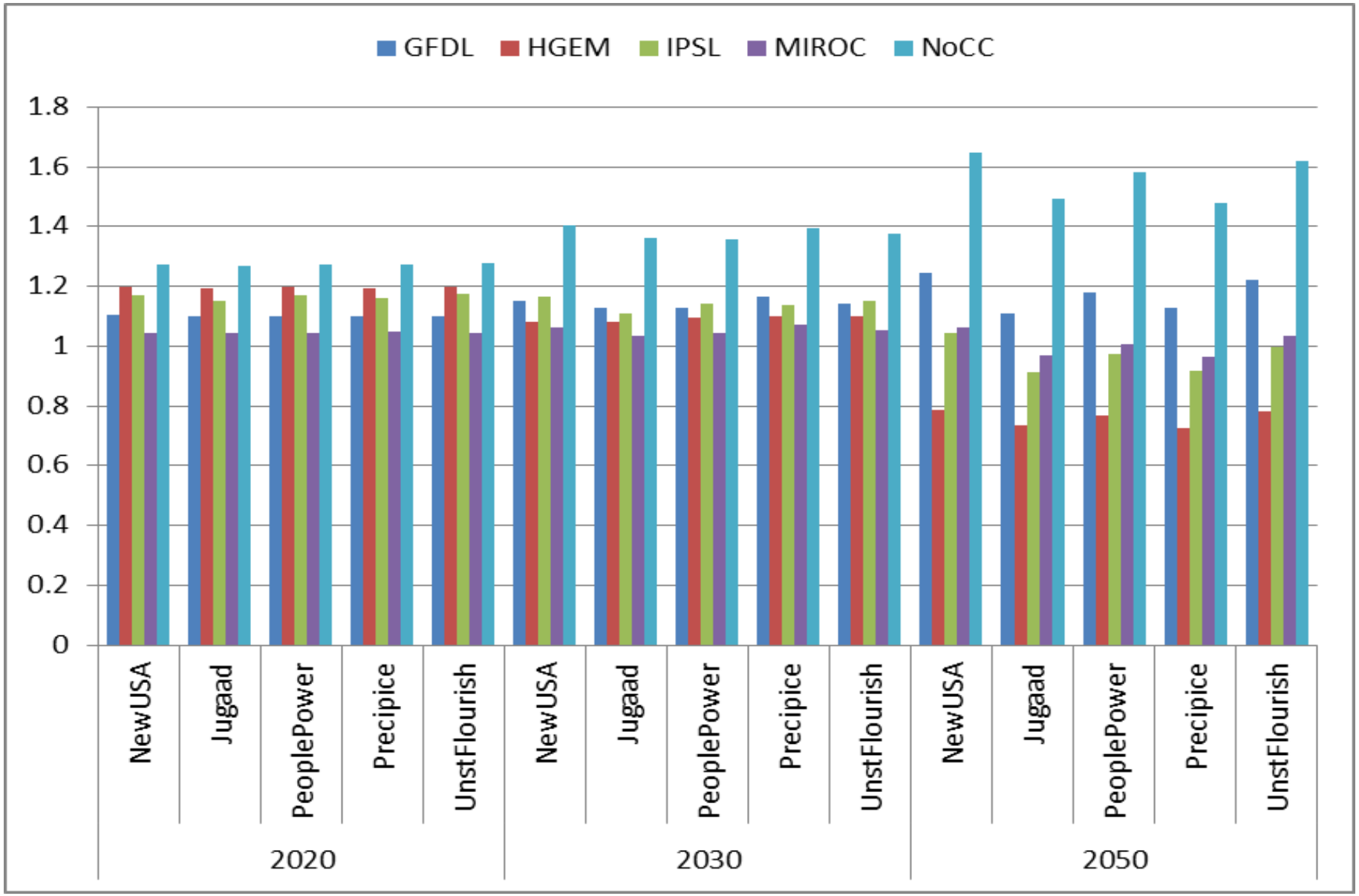
Sleeping Lions



Modelled Land Use/Land Cover:



LandShift results – Sleeping Lions

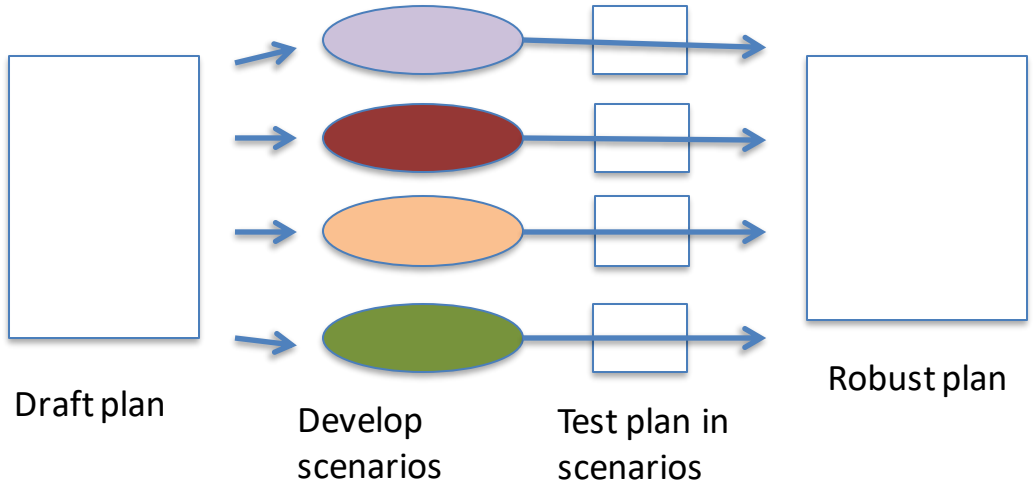


Sugarcane yields under four climate models and “no climate change”
for five socio-economic scenarios for South Asia

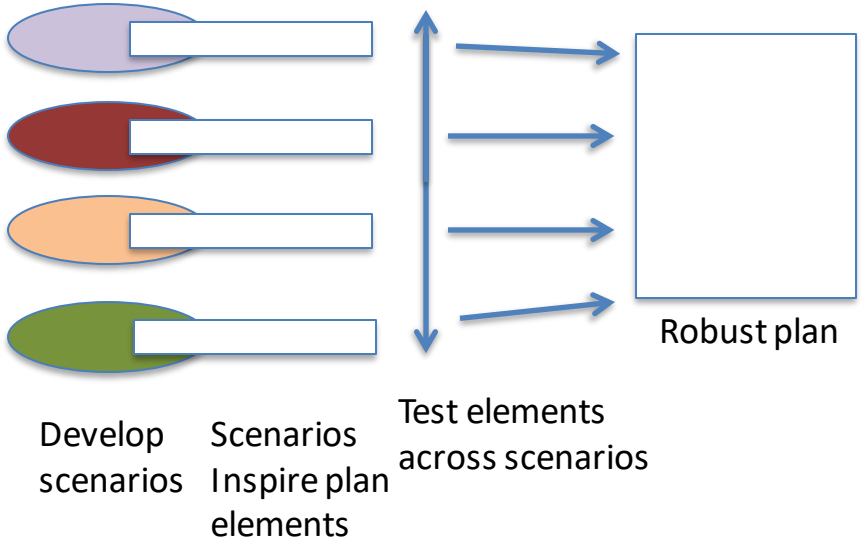
Using scenarios for policy guidance

Two approaches:

- 1. start with plan, develop scenarios; test across scenarios (Honduras)

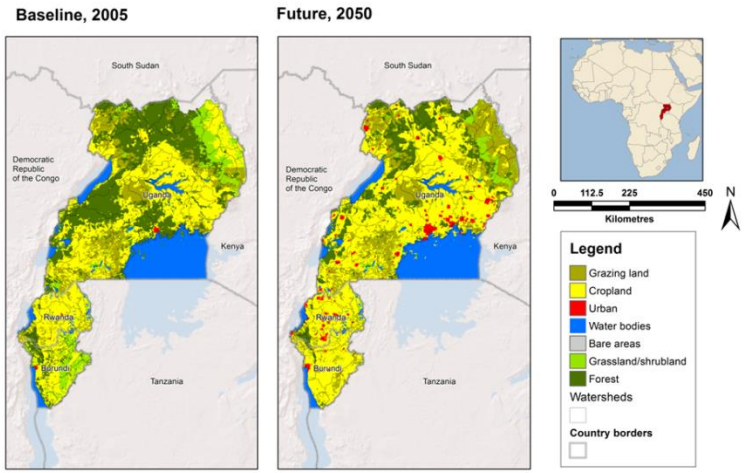


- 2. Develop scenarios, develop plans in individual scenarios, test across scenarios (Bangladesh)



Scenario narratives and visuals

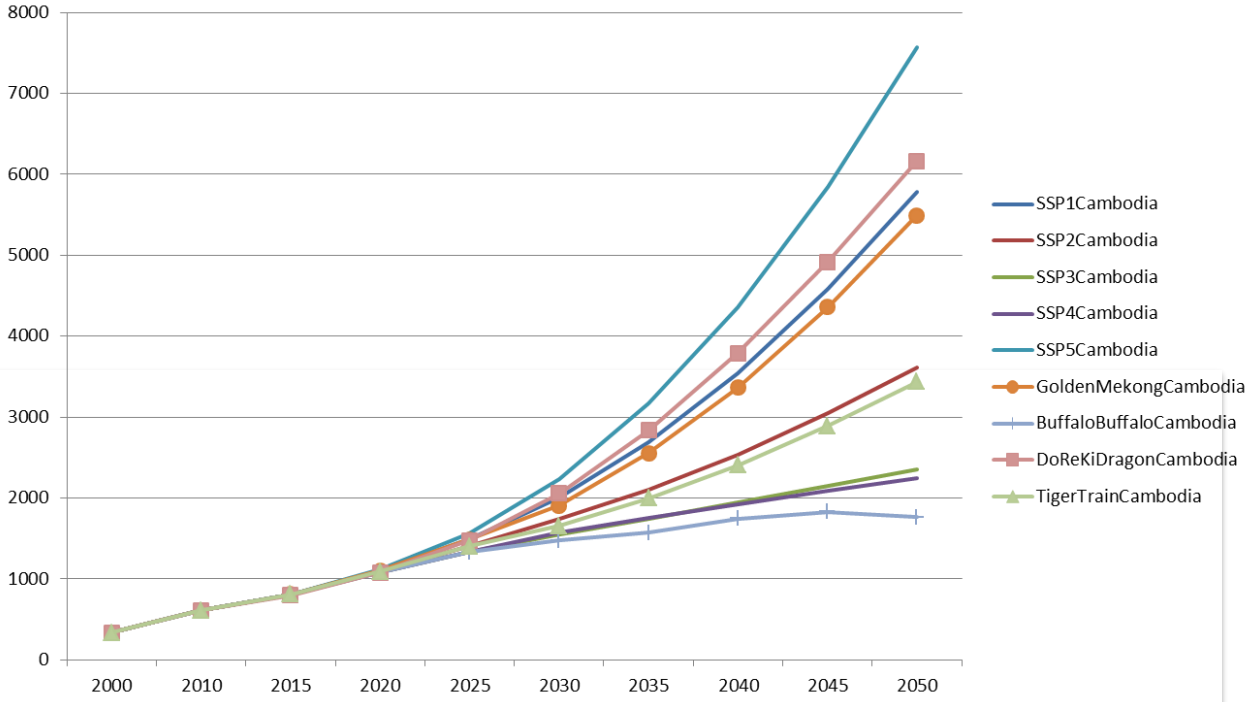
Modelled Land Use/Land Cover:



Spatially explicit scenarios (UNEP WCMC and LandShift (Kassel)

Videos

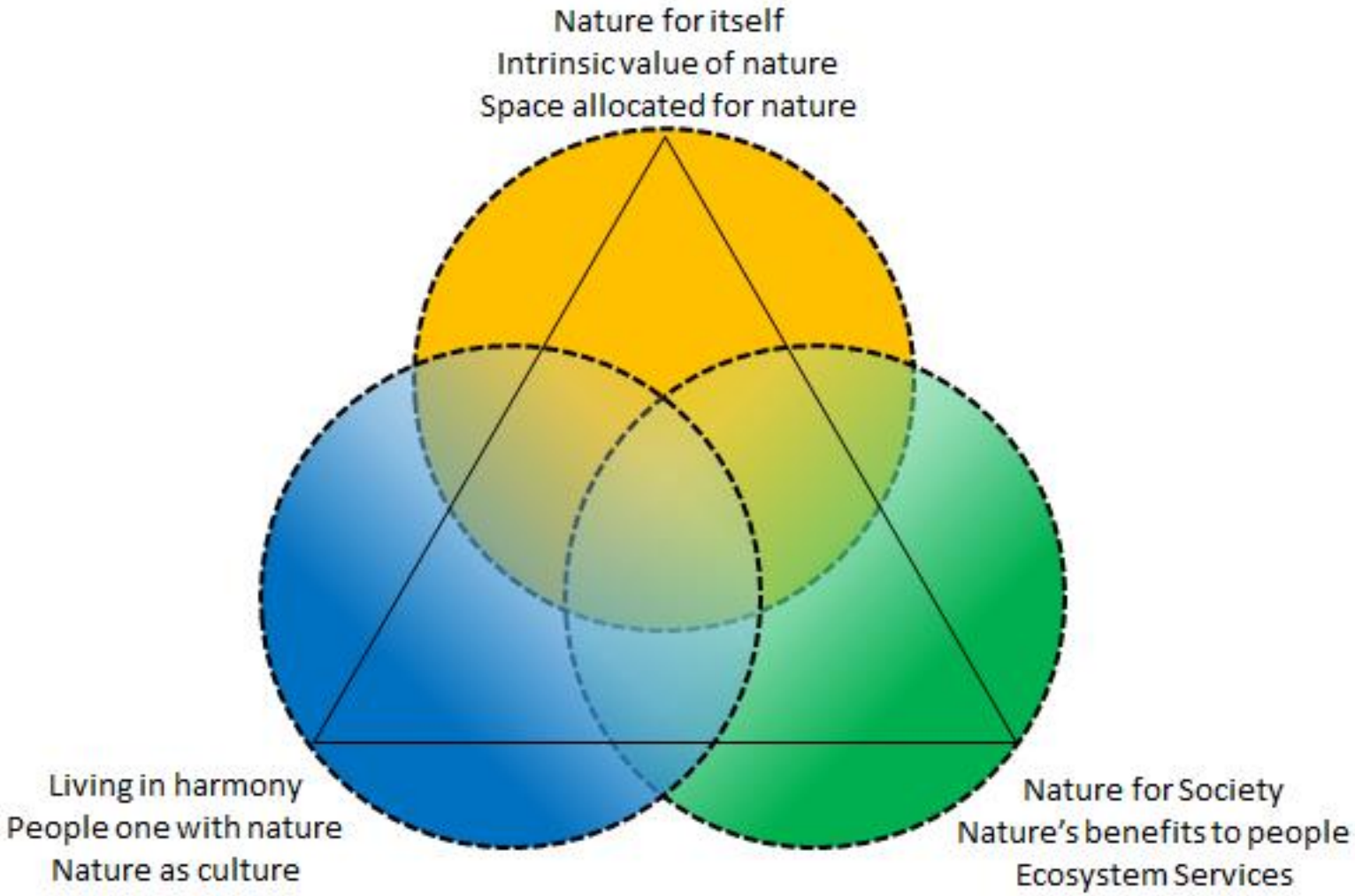
Quantified scenarios: IMPACT (IFPRI), GLOBIOM (IIASA) and now MAGNET (WUR Economic Research) models



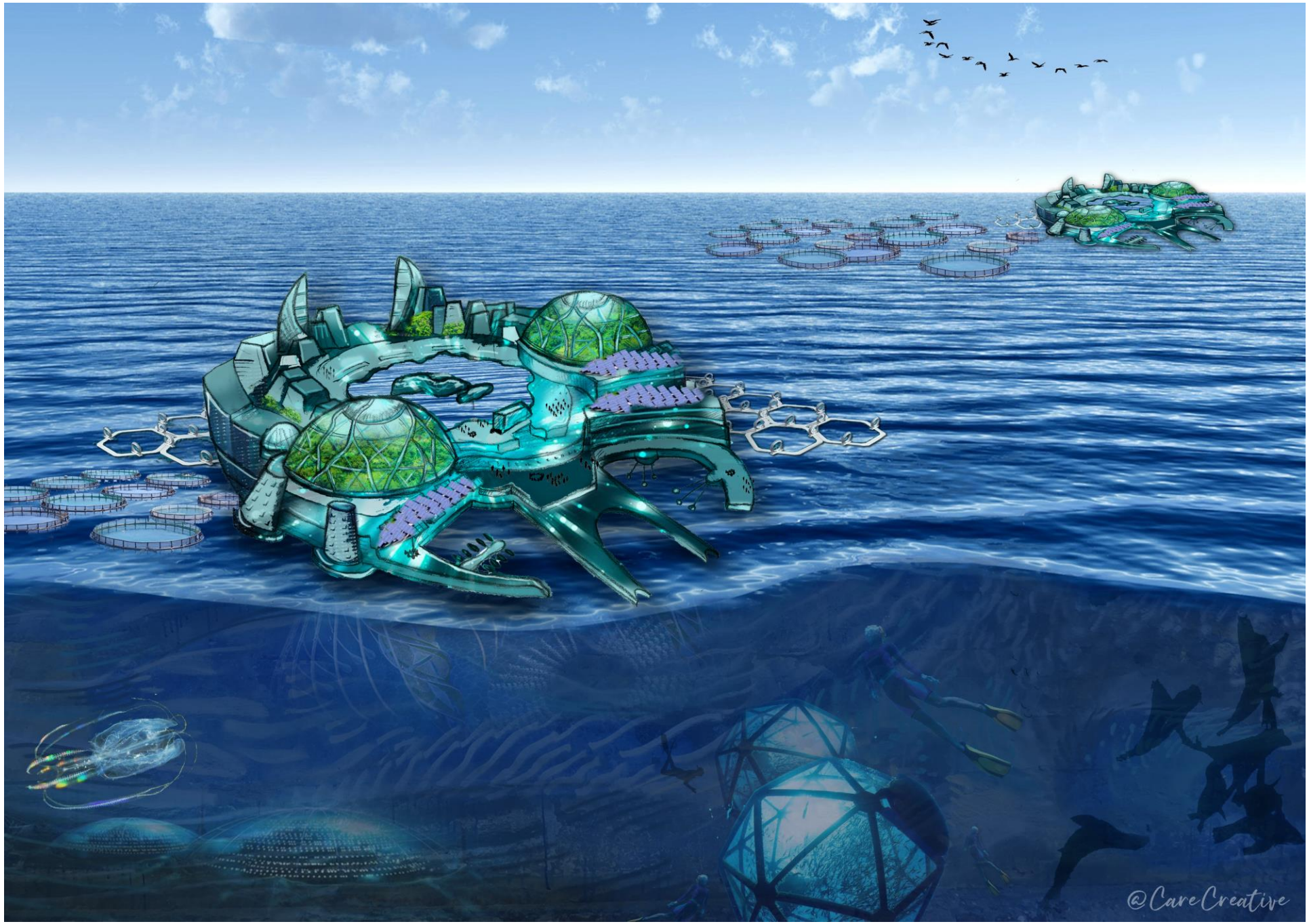
Dominated by Dystopian narratives

“Stories are powerful things:
they create our reality as much as they explain it.”
– Alex Evans

Nature Futures framework: appreciating diverse values for nature



@CareCreative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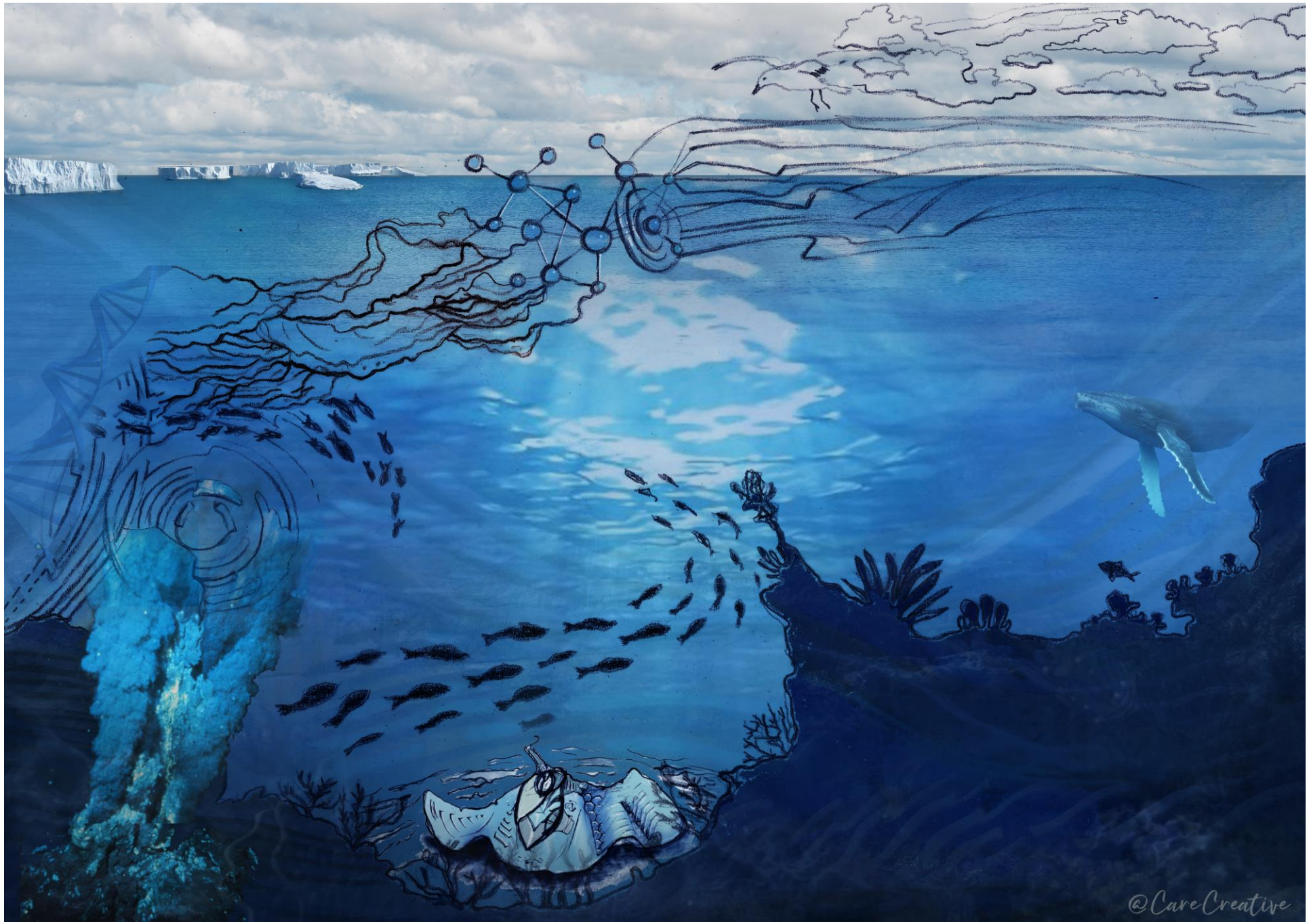
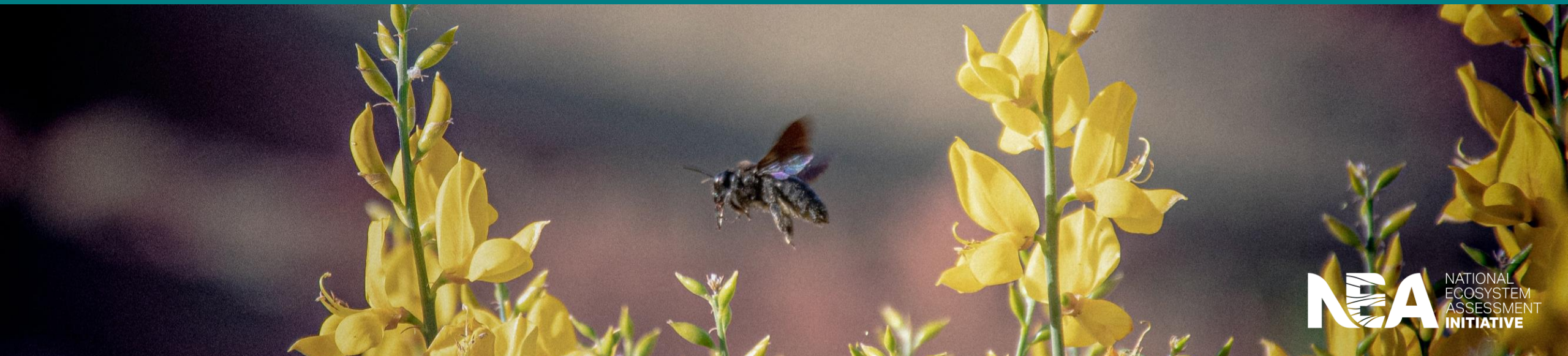

@CareCreative

"If you do not change direction,
you may end up where you are heading."

Q&A



What's next?

Webinar: Including multiple values in a national ecosystem assessment

Date to be confirmed

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@Joerg Steber

Thank you!

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