

### Webinar on Landmark U.N. Biodiversity Report with Lead Co-Author May 21@1pm EDT



# Leveraging Sustainability: Insights from the IPBES Global Assessment

## Kai Chan

Professor, CHANS Lab (Connecting Human & Natural Systems)Institute for Resources, Environment and SustainabilityUO SPI 2019.5.21© Kai Chan@KaiChanUBC



Global Young Academy The voice of young scientists around the world





Science & Environment

## Five things we've learned from nature crisis study

By Matt McGrath Environment correspondent

() 6 May 2019

📀 🔰 🔽 < Share



Global trends for insects are not known, but large declines have been recorded in some locations



World

## Nature is in its worst shape in human history, UN report says

#### f 🕑 🛛 🥌 (in)

'This is really our last chance to address all of that,' godfather of biodiversity says The Associated Press · Posted: May 06, 2019 6:30 AM ET | Last Updated: May 6



The United Nations issued its first comprehensive global scientific report on biodiversity, which explored the threat of extinction for Earth's plants and animals. (Ben Curtis, File/Associated Press)





More than 450 of the worlds leading experts. One #GlobalAssessment

**#IPBES7** 

# Outline

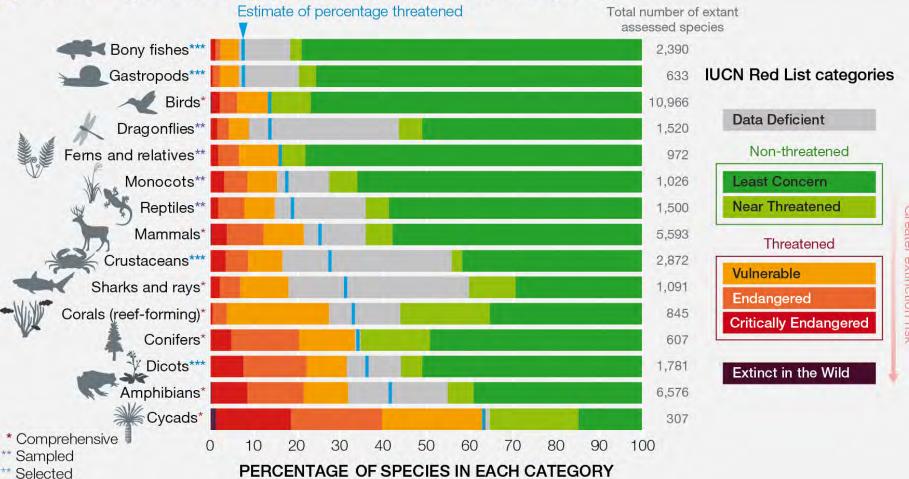
- IPBES Global Assessment intro
- Highlights (of the bad news)
- Levers & leverage points for interlinked goals
- Putting it together
- Negotiations
- A role for civic action
- CoSphere/Earth+

# **IPBES GA Contents**

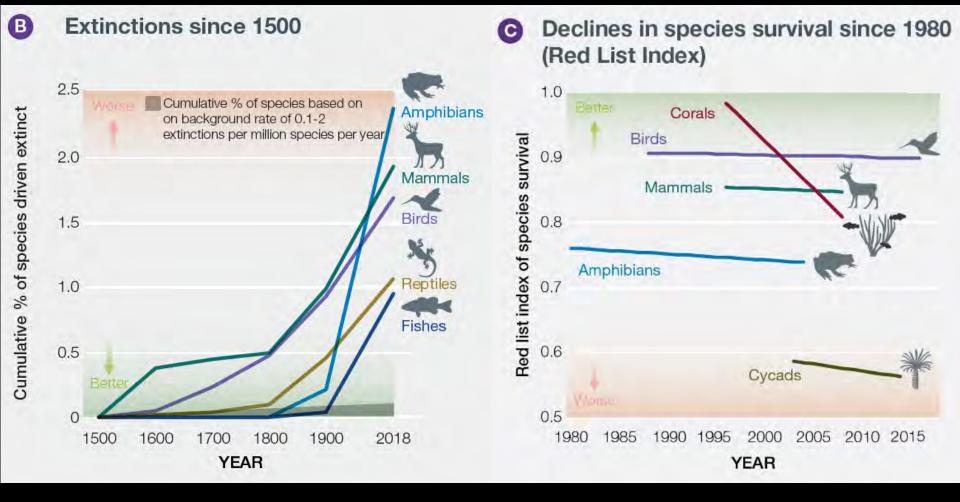
### I. Introduction

- 2. Status & Trends: Nature, Its Contributions, Drivers
- 3. Progress and Prognosis towards Goals
- 4. Scenarios & Models
- 5. Pathways towards a Sustainable Future
- 6. Options, Obstacles, Opportunities

#### Current global extinction risk in different species groups



Greater extinction risk



91 of the 107

leading global crop types rely on **animal pollination** 



**#IPBES7** 

SASSESSMENT ON POLLINATORS, POLLINATION AND FOOD PRODUCTION



Is the world on track to meet the global goals for nature and sustainability? #GlobalAssessment 6 May



### **Aichi Biodiversity Targets**



### Sustainable Development Goals



| 0              | Target (abbreviated) |                              | Progress towards elements of each target |             |      |         |  |
|----------------|----------------------|------------------------------|--|-------------|------|---------|--|
| Goal           |                      |                              | Poor                                     | Moderate    | Good | Unknown |  |
| Drivers        |                      | Awareness                    |  | $\sim \sim$ |      |         |  |
|                | Q <sup>c</sup>       | Planning & accounting        | 8  |             |      |         |  |
|                | 1                    | Incentives                   | 88                                       |             |      |         |  |
|                |                      | Production & consumption     | 88                                       |             |      |         |  |
| Pressures      | J.                   | Habitat loss                 | 88                                       |             |      |         |  |
|                |                      | Fisheries                    | 88                                       |             |      | 0       |  |
|                | 37                   | Agriculture & forestry       | 88                                       | ~           |      |         |  |
|                | 21                   | Pollution                    | 88                                       |             |      |         |  |
| š              | 22                   | Invasive alien species       | 88                                       |             | V    | 0       |  |
|                | -                    | Coral reefs etc              | 88                                       |             |      |         |  |
| S              | 11                   | Protected & conserved areas  |  | 0000        | VV   |         |  |
| Status         | 12                   | Extinctions prevented        | 88                                       |             |      |         |  |
| õ              |                      | Genetic diversity            |  | ~~~~        |      | 0       |  |
| Benefits       | 14                   | Ecosystem services           | ×  |             |      | 0       |  |
|                | 15                   | Ecosystem restoration        |  |             |      | 88      |  |
|                | 16                   | Access & benefit sharing     |  | $\sim$      | V    |         |  |
| Implementation | L.                   | Strategies & action plans    |  | ~~          | V    |         |  |
|                | 718                  | Indigenous & local knowledge |  | $\sim$      |      | 99      |  |
|                | 19                   | Biodiversity science         |  | $\sim$      |      | 0       |  |
|                | 20                   | Financial resources          |  | $\sim$      |      |         |  |

| Selected Sustainable<br>Development Goals |                                       | Recent status<br>and nature's<br>support | Uncertain       |         |              |
|---|---------------------------------------|--|-----------------|---------|--------------|
|   |                                       | Poor/Declining<br>support                | Partial support | Unknown | relationship |
| 1 ‰m<br>/f <b>if††if</b>                  | No poverty                            | 00                                       |                 |         | 00           |
| 2 ****                                    | Zero hunger                           | 0  | 000             |         |              |
| 3 and well-ben                            | Good health and well-being            |  |                 | 88      | 00           |
| 6 CLEAN HATER                             | Clean water and sanitation            | 000                                      | •               |         |              |
|   | Sustainable cities and<br>communities | 0000                                     | •               |         |              |
| 13 LEMAN                                  | Climate action                        | 0  | •               | 000     |              |
| 14 LEE<br>BELOW WATER                     | Life below water                      | 0000                                     | 000             |         |              |
| 15 br.wo                                  | Life on land                          | 000                                      | 000             |         |              |

\* There were no targets that were scored as good/positive status and trends



#### Source: PBL

# Takeaways

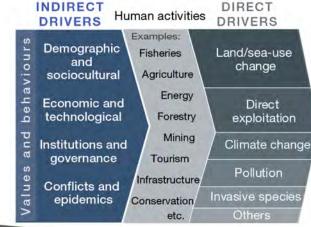
- Conservation and sustainable use—key but insufficient
- Successful pathways addressed demand-side, institutions
- Some 'levers' and 'leverage points' were largely implicit
- Thus we supplemented with extensive literature reviews



Integrative, adaptive, informed and inclusive governance approaches including smart policy mixes, applied especially at leverage points

MULTI ACTOR GOVERNANCE INTERVENTIONS (LEVERS)

- · Incentives and capacity building;
- Cross-sectoral cooperation
- Pre-emptive action
- Decision-making in the context of resilience and uncertainty
- Environmental law and implementation





#### LEVERAGE POINTS

- Embrace diverse visions of a good life
- Reduce total consumption and waste

- Unleash values and action
- Reduce inequalities
- Practice justice and inclusion in conservation
- Internalize externalities and telecouplings
- . Ensure technology, innovation and investment
- Promote education and knowledge generation and sharing

Iterative Iearning Ioop