Strengthening cooperation and identifying linkages for the sound management of chemicals and wastes beyond 2020

Bob Watson

Why it matters to cooperate and collaborate?
13-14 February 2020, Geneva, Switzerland
Sound management of chemicals and wastes is central to the UN Sustainable Development Goals

Each of these clusters demonstrates a strong link with the SDGs

1. Health (e.g. SDG 3, target 3.9; SDG 6, target 6.3; SDG 12, target 12.4)
2. World of Work (e.g. SDG 8)
3. Climate Change (e.g. SDG 13)
4. Biodiversity (e.g. SDG 14 and 15)
5. Agriculture and Food (e.g. SGD 2 and 15)
6. Sustainable Consumption and Production (e.g. SDG 12)
7. Human Rights (e.g. SDGs 2, 3, 4, 5 and 10)
Underpinning the proximate causes of deterioration in nature are the root causes, or indirect drivers of change.
Examples of the impacts of unsound management of chemicals and wastes on biodiversity

Informal or poorly regulated artisanal and small scale gold mining, often using mercury and occurring in the protected areas, causes land degradation and deforestation.

Neonicotinoids, which are among the world’s most widely used insecticides, can affect the sperm count of male honey bees and reduce the number of queen bees. (source: GCO II)

Organic and nutrient enrichment related to sewage/industrial discharges and land run-off have led to increases in hypoxic zones in both marine and freshwater ecosystems in the last 50 years. (source: GCO II)

Marine plastic pollution in particular has increased tenfold since 1980, affecting at least 267 species, including 86 per cent of marine turtles, 44 per cent of seabirds and 43 per cent of marine mammals. (source: IPBES)
Chemicals and waste impact other priorities
Health, work and environment sectors closely interlinked to Chemicals and Wastes - Artisanal and small-scale gold mining

Artisanal and small-scale gold mining (ASGM) is the largest single activity causing mercury releases worldwide.

In a Ghana study, more than 50 per cent of miners and 25 per cent of non-miners surveyed exhibited serious mercury toxicity and up to 7 per cent had neurological problems.

ASGM has been estimated to provide direct employment for over 16 million people, including women and children.

ASGM introduced about 1220 tonnes of mercury into the terrestrial and freshwater environments in 2015.

ASGM infringes upon the right of children and adults to the highest attainable standard of health.
### The Libreville Declaration (2008) & Commitment to Action

A cohesive and integrated framework to address human health and environment linkages on the continent.

- **52** Committed African states
- **11** Priority actions being implemented

Countries have made significant progress towards securing political commitment for catalysing the policy, institutional and investment needed to reduce environmental threats to human health.

International environmental health priorities have evolved with the adoption of the SDGs.

### Initiative: African ChemObs

Integrated Health and Environment Observatories and Legal and Institutional Strengthening for the Sound Management of Chemicals in Africa

- **9** African countries: Ethiopia, Gabon, Kenya, Madagascar, Mali, Senegal, Tanzania, Zambia and Zimbabwe
- GEF approved $10.5 million project, until 2022

Aim to provide timely decision making tools for policy making and actions to predict, prevent and reduce chemicals risks to human health and the environment and remediate pollution.
Convention on Biological Diversity

• Convention entered into force in 1993 - 196 Parties

• 3 objectives: conservation of biological diversity; sustainable use of biodiversity; fair and equitable sharing of benefits from use of genetic resources

• Current Strategic Plan of CBD which comes to an end in 2020 comprised of a shared vision, a mission, 5 strategic goals and 20 targets, collectively known as the Aichi Targets
Aichi Biodiversity Targets

**Target 1:** Awareness increased
**Target 2:** Biodiversity values integrated
**Target 3:** Incentives reformed
**Target 4:** Sustainable consumption and production
**Target 5:** Habitat loss halved or reduced
**Target 6:** Sustainable management of marine living resources
**Target 7:** Sustainable agriculture, aquaculture and forestry
**Target 8:** Pollution reduced
**Target 9:** Invasive alien species prevented and controlled
**Target 10:** Pressures on vulnerable ecosystems reduced
**Target 11:** Protected areas increased and improved
**Target 12:** Extinction prevented
**Target 13:** Genetic diversity maintained
**Target 14:** Ecosystems and essential services safeguarded
**Target 15:** Ecosystems restored and resilience enhanced
**Target 16:** Nagoya Protocol in force and operational
**Target 17:** NBSAPs adopted as policy instrument
**Target 18:** Traditional knowledge respected
**Target 19:** Knowledge improved, shared and applied
**Target 20:** Financial resources from all sources increased

• **TARGET 8:** By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.

• Pollution as recognized by CBD Aichi Target 8 which aims to bring pollution to levels that are not detrimental to ecosystem function and biodiversity by 2020.
## Progress towards the Aichi Biodiversity Targets

<table>
<thead>
<tr>
<th>Goal</th>
<th>Target (abbreviated)</th>
<th>Progress towards elements of each target</th>
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<tr>
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<td>Poor</td>
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<td>Drivers</td>
<td>Awareness</td>
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<td>Planning &amp; accounting</td>
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<td>Incentives</td>
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<td>Production &amp; consumption</td>
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<td>Pressures</td>
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<td>Pollution</td>
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<td>Invasive alien species</td>
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<td>Coral reefs etc</td>
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<td>Status</td>
<td>Protected &amp; conserved areas</td>
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<td>Extinctions prevented</td>
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<td></td>
<td>Genetic diversity</td>
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<td>Benefits</td>
<td>Ecosystem services</td>
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<td>Ecosystem restoration</td>
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<td>Access &amp; benefit sharing</td>
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<td>Implementation</td>
<td>Strategies &amp; action plans</td>
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<td>Indigenous &amp; local knowledge</td>
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<td>Biodiversity science</td>
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<td>Financial resources</td>
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Options for strengthening the links between the biodiversity post-2020 framework with chemicals & wastes

Why is it imperative to strengthen the links between biodiversity and chemicals and waste?

➢ Pollution, including from the **unsound management of chemicals and waste**, is one of the **key drivers threatening the planets biodiversity** as recognized by CBD Aichi Target 8 which aims to bring pollution to levels that are not detrimental to ecosystem function and biodiversity by 2020.

➢ The **post-2020 Global Biodiversity Framework cannot succeed without addressing pollution** as a key driver of biodiversity loss, as the beyond-2020 chemicals and waste agenda cannot succeed alone.

➢ There is an urgency to strengthen the linkages between our common goals as global sales in chemicals was worth approximately US dollars 3.5 trillion (excluding pharmaceuticals) in 2017 and **chemicals production is expected to double** in size between 2017 and 2030.

Global Chemical Outlook II
Recommendations

• Draw linkages between two convention frameworks

• Identify targets and indicators of relevance to the frameworks

Using common indicators is an opportunity that we must seize to monitor progress on our common goals and targets while opening the door a bit wider in terms of linking biodiversity with chemicals and waste.

REFERENCE (option 3)
The related targets and indicators from one framework are referenced in the other framework.

Elements to consider:
• ...

COMPLEMENT (option 2)
The related pollution and biodiversity targets and indicators are aligned to complement each other. Explicit instructions are provided in both frameworks.

Elements to consider:
• ...

MIRROR (option 1)
The related pollution and biodiversity targets and indicators are mutually agreed upon and mirror each other in both biodiversity and chemicals and waste frameworks.

Elements to consider:
• Relatively short timeline before the both frameworks are to be adopted (October 2020)
• Contributing to stronger national coordination across both clusters
• ...
2020 Processes and Opportunities to Act

**February 2020**
- 24-28 February: Rome, Italy
  - 2nd OEWG

**March 2020**
- 23-27 March: Bucharest, Romania
  - SAICM IP4

**March 2020**
- 20-22 February: Kunming, China
  - Thematic Consultation on Transparent Implementation, Monitoring, Reporting and Review for the Post-2020 Global Biodiversity Framework

**March 2020**
- 18-20 February: Kunming, China
  - Thematic Workshop on Human Rights as enabling condition in the post-2020 global biodiversity framework

**March 2020**
- 13-14 February: SAICM Indicator meeting

**March 2020**
- 1-2 March: Kunming, China
  - Thematic Consultation on Capacity-building and Technical and Scientific Cooperation for the Post-2020 Global Biodiversity Framework

**March 2020**
- 25-27 March: Bern, Switzerland
  - Workshop of Biodiversity-Related Conventions on the post-2020 global biodiversity framework (Bern II)

**March 2020**
- 30 March - 4 April: Bern, Switzerland
  - Thematic Consultation on the Sustainable Use of Biological Diversity for the post-2020 global biodiversity framework

**July 2020**
- 18-23 May: Montreux, Switzerland
  - 24th SBSTTA meeting

**July 2020**
- 27-31 July: Cali, Colombia
  - 3rd OEWG

**September 2020**
  - UNGA 75

**OCTOBER 2020**
- 5-9 October: Bonn, Germany
  - ICCM5

**OCTOBER 2020**
- 15-28 October: China
  - CBD COP15
<table>
<thead>
<tr>
<th>Draft 2030 targets</th>
<th>Suggested elements of the targets for monitoring</th>
<th>Suggested indicators&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Proposed Specific indicator (sub indicator?)</th>
<th>Parameter (metric tons, number, etc.)</th>
<th>Available / Under active development</th>
<th>SDGs indicator</th>
<th>Aichi Indicator</th>
<th>Used in (GBO, IPBES, GCO, etc.)</th>
<th>Data SOURCE(S)</th>
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<td>reducing threats to biodiversity</td>
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<td>Change in the rate of pesticide use.</td>
<td>Amount of pesticide use*</td>
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<td>Change in the rate of plastic pollution.</td>
<td>Index of Coastal Eutrophication (ICEP) and Floating Plastic debris Density. Proportion of reusable, recyclable or where viable alternatives do not exist, recoverable plastics.</td>
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<td>Change in amount of other pollutants (including light and noise).</td>
<td>To be identified</td>
<td>EXAMPLE: Trends in POPs emissions</td>
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<td>X</td>
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<td>Clearing-house mechanism Stockholm Convention</td>
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<td>EXAMPLE: Trends in mercury emissions</td>
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<td>GMA</td>
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### Draft 2030 targets

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<td><strong>Target 8.</strong> Conserve and enhance the sustainable use of biodiversity in agricultural and other managed ecosystems to support the productivity, sustainability and resilience of such systems, reducing by 2030 related productivity gaps by at least [50%].</td>
<td>- Change in trends in pollinators and benefits   &lt;br&gt; - Change in soil health.  &lt;br&gt; - Change in trends in the use of natural pest controls.</td>
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<td><strong>Target 9.</strong> Enhance nature-based solutions contributing, by 2030, to clean water provision for at least [XXX million] people.</td>
<td>- Change in the number of people with access to sufficient amounts or quality freshwater.  &lt;br&gt;</td>
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<td><strong>Target 12.</strong> Reform incentives, eliminating the subsidies that are most harmful for biodiversity, ensuring by 2030 that incentives, including public and private economic and regulatory incentives, are either positive or neutral for biodiversity.</td>
<td>- Change in the value of subsidies harmful to biodiversity  &lt;br&gt; - Change in the value of positive incentives for biodiversity</td>
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<td><strong>Target 13.</strong> Integrate biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts, ensuring by 2030, that biodiversity values are mainstreamed across all sectors and that biodiversity-inclusive strategic environmental assessments and environmental impact assessments are comprehensively applied.</td>
<td>- Biodiversity values integrated into national and local planning, development processes, poverty reduction strategies.  &lt;br&gt; - Biodiversity values integrated into national accounts.  &lt;br&gt; - Application of biodiversity-inclusive strategic environment assessments and environmental impact assessments.</td>
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<td><strong>Target 17.</strong> People everywhere take measurable steps towards sustainable consumption and lifestyles, taking into account individual and national cultural and socioeconomic conditions, achieving by 2030, just and sustainable consumption levels.</td>
<td>- Change in the trends in the use of resources.  &lt;br&gt; - Change in the number of countries with policies in place to promote sustainable consumption.</td>
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Strengthening the Science-Policy Processes for Chemicals and Waste

• UNEA has requested UNEP to develop options to strengthen the science-policy interface

• UNEP will provide a draft paper analyzing the strengths and weaknesses of different options

• Currently a UNEP synthesis paper is being developed that includes the chemicals and waste issues
The scientific basis for this report by UNEP will be the key findings from recent international environmental assessments such as:

- IPBES - pollination, four regional (Americas, Africa, Asia and Pacific, and Europe and Central Asia), land degradation and restoration, and the global assessment;
- IPCC - AR-5 WG I, II and III, the global warming of 1.5C, climate change and land, and the ocean and cryosphere in a changing climate assessment;
- GEO-6 global and regional assessments;
- Chemicals outlook II;
- Global resources outlook 2019;
- GSDR;
- CBD GBO 4/5;
- FAO- biodiversity for agri-food;
- CCD-Global Land Outlook;
- IEA – Global Energy Outlook;
- WRI- Food report;
- SEI-Production Gap report; and
- UNEP Emissions gap report.
Executive Summary (policy-relevant)

1.0. Introduction

2.0 Human dependence on the planetary earth system

3.0. Observed and projected environmental changes, with regional specificity, and an attribution to the underlying causes of change

4.0. Implications of observed and projected changes in climate, biodiversity, land degradation, chemicals and natural resources on the attainment of environmental goals

5.0. Risks of observed and projected changes in climate, biodiversity, air and water quality, chemicals, and global resources to human well-being as set out in the goals of the SDGs most sensitive to changes in the environment

6.0 Closing the gap: Actions for achieving the post 2020 biodiversity agenda, the Paris climate agreement, the goals of a sub-set of the SDGs, chemicals and global natural resources, emphasizing where appropriate nature-based solutions
Thank you for your attention