Towards a better integration of Environment and Ecosystem Health in the One Health concept

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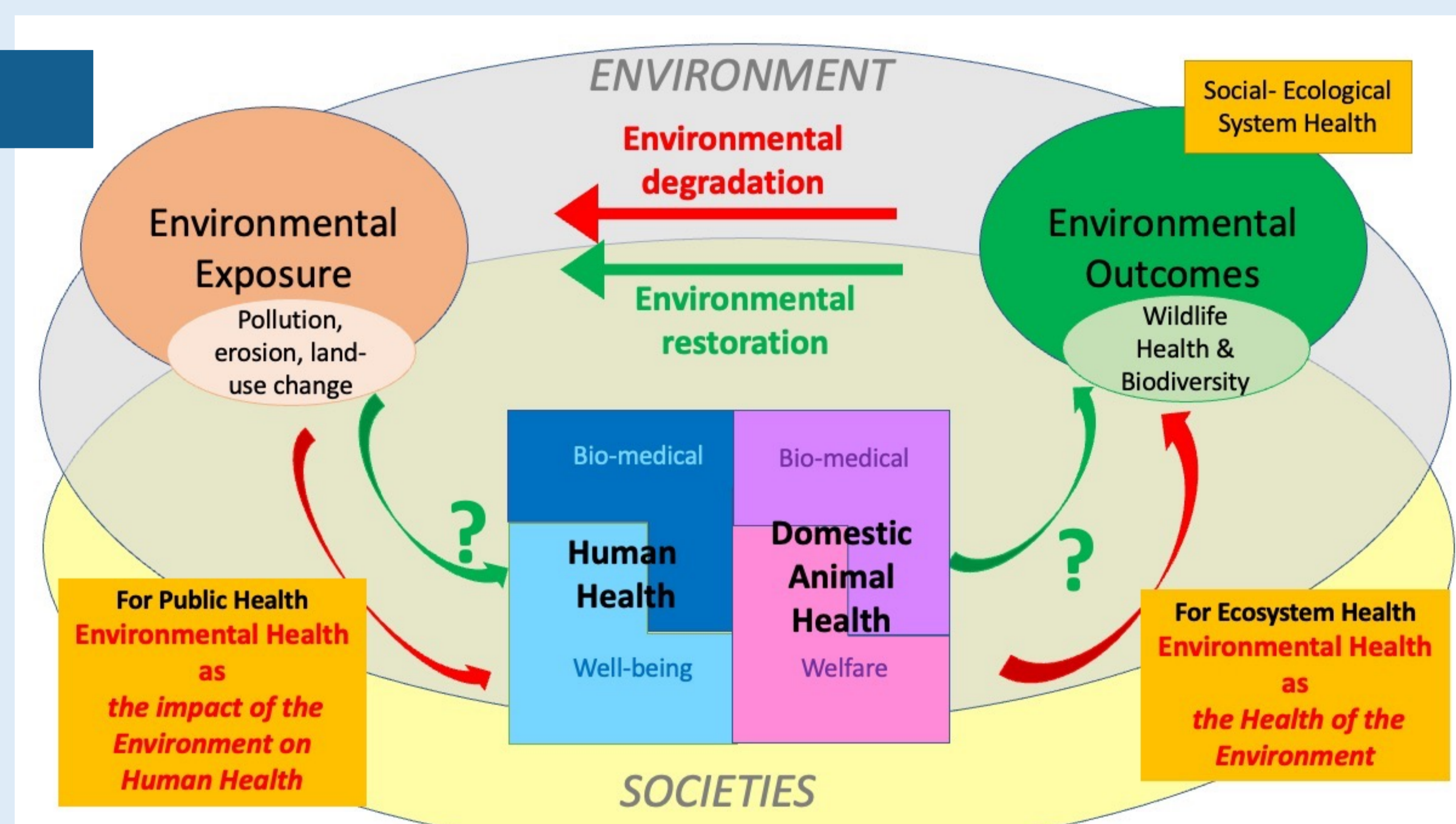
Introduction / Background

- The **One Health Quadripartite** is guiding the global institutionalization and operationalization of One Health (OH).

- However, **the health of the environment** is noted as **the weakest component of the OH concept**.

- The challenges facing **environmental and ecosystem health (EEH)** and their linkages with the other components of human, animal and plant health range across **environmental degradation, air, water and soil pollution, transformation of natural habitats, wildlife health, threats to ecosystem function and integrity including the accumulation of toxic chemicals, heavy metals and microplastics in the environment**.

- In 2022, Action Track 6 from the Joint Plan of Action (2022) identified the need to better "integrate the environment into OH". To achieve **healthy ecosystems with healthy humans, animals and plants coexisting in harmony with nature**, EEH needs to be strengthened in OH initiatives.

Methods

- Using the framework of the **COHESA project**
- 3-day Workshop held in the Hwange ecosystem of the KAZA Transfrontier Conservation Area, Zimbabwe
- Experts, academics and government representatives from **12 African countries**.
- 1.5-days presentations from a **range of EEH specialists**.
- **Participatory sessions** were organized to explore the multiple dimensions of EEH.
- **Field visits** to local project sites.
- Then, **country advocacy strategies** were designed to better integrate EEH into country OH platforms.

Results

- The conference gathered **100+ participants** from more than **15 African countries.**

- **The EEH component is more diverse** than the other OH components (Animal & Human Health).

- An **explanatory framework** (on the right) was co-developed with mutual understanding of core concepts, relationships and feedbacks.

- **Do we speak the same language?** E.g., "Environmental Health" means different things for different stakeholders (see graph).

- A **context-specific framing of OH topics** can help identify EEH components and experts to include in the intervention.

Framework of relationships between Environment and Ecosystem Health and other health components of One Health: Dominant human societies include activities that produce *environmental outcomes* (red arrows) on the **health of the environment** or the **health of social-ecological systems** ("Environmental health" as seen through the Ecosystem health prism), including the health of free-ranging wild populations and biodiversity. These outcomes induce *environmental degradation* (e.g., pollution, erosion and land-use change) that trigger *environmental exposure* to human and their domestic animal populations ("Environmental health" as seen through the Public Health prism). This environmental exposure can trigger health issues not only at the biomedical level (e.g., diseases) but also at the well-being/welfare level. The main hypothesis of environmental/ecosystem health (green arrows) is that with human activities that trigger more positive than negative environmental outcomes, *environmental restoration* will be promoted and negative environmental exposure will be decreased or become positive (e.g., contributing to people health) in return.

Conclusion

- **Promoting Environment and Ecosystem Health** is paramount to delivering One Health in the current poly-crisis context including climate change and biodiversity loss.

- For a meaningful and inclusive OH concept that delivers its objectives, the **EEH component of OH platforms need to be more inclusive** of the full range of expertise it encompasses and must be defined within the local context.

- Pro-active **advocacy at national levels** is needed to attract new EEH experts in OH platforms and convince members of OH platforms to be more inclusive towards EEH.

- The **COHESA project** supports countries to develop **advocacy strategy for EEH inclusion** in national OH platforms.

Scan for OneHealthObservatory.org

Scan for Hwange Conference presentations

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