DEUTSCH, NATHAN [S5-P21]

Towards an HDN Data Module: Concepts and Tools for Data Discovery, Management and Governance
Co-authors: Kaia Boe, IUCN, Gland, Switzerland; Iain Davidson-Hunt, Natural Resources Institute, University of Manitoba, Canada; Graham Dutfield, School of Law, University of Leeds, UK; Kevin Smith, IUCN, Cambridge, UK

The IUCN HDN knowledge basket promotes the uptake of existing knowledge and aims to generate new knowledge on the contribution of biodiversity to local livelihoods and wellbeing for Indigenous People and local communities (IPLCs). In early development of HDN, it was noted that a vast amount of data has already been collected globally in relation to use of biodiversity by communities. Yet, this data is rarely used in a systematic manner to improve natural resource decision-making that considers the use and value of biodiversity for IPLCs. Secondary data analyses can also reduce the burden of repeated local primary data collection efforts. This data, however, may be poorly accessible, as it might be stored offline or in digital formats in multiple datasets that are not easily linked without much manual labour. The need has been identified to develop a set of dedicated digital tools to complement the secondary data assessment phase of the HDN methodological workflow. To be successful, this approach must involve generating knowledge that is credible and legitimate for communities and practitioners working across diverse policy areas and applications, as multiple knowledge systems come into play. Issues also emerge related to governance, validation and curation of primary data emerging from community-level HDN assessments. As such, the HDN knowledge basket presents data management challenges associated with both global secondary data discovery and interoperability and primary data storage and governance protocols. HDN aims to create interoperability between key global datasets of interest. This paper serves to support the development of digital tools, technologies and protocols. It presents a broad scoping of data requirements for HDN assessments and suggests possibilities for creating linkages across multiple data sources for automation of certain parts of the HDN assessment workflow. We scope the main challenges involved in linking across diverse datasets, identifying secondary data sources, integrating messy data and tacit knowledge. Approaches to compiling and sharing data are discussed, including crowdsourcing, data mining and standards for interoperability. Finally, we make observations on integration with other key IUCN knowledge products, namely the Red List of Threatened Species and the Red List of Ecosystems.