



...free and open access to biodiversity data

Data Publishing Framework: Unlocking access to the untapped world of primary biodiversity data

Lack of professional recognition to all concerned for their efforts is hampering progress in primary scientific data publishing. To address these issues the GBIF Data Publishing Framework Task Group (DPF TG) was constituted. The DPF TG recommended that the establishment of a '*Data Publishing Framework*' to encourage and recognise investments and efforts by institutions and individuals towards management, and the publishing of primary scientific data on a par with recognitions received for scholarly publications would be a potential solution for overcoming this delay in progress.

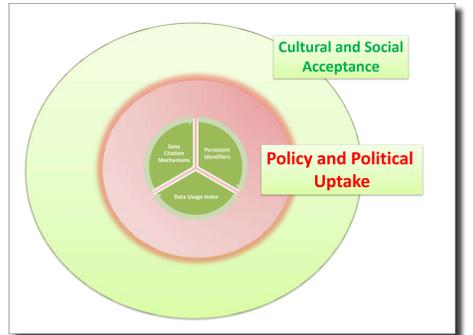


Fig. 2. Political, Social and Cultural uptake is essential for implementing the 'Data Publishing Framework'

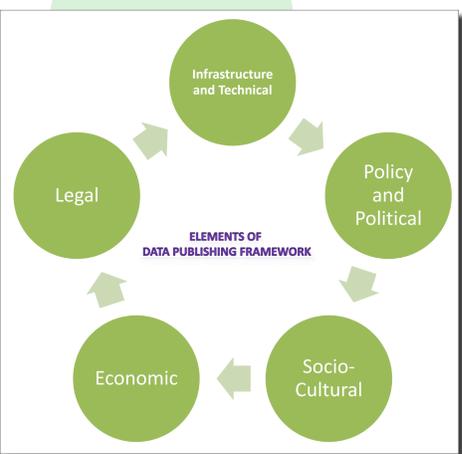


Fig. 1. Components of Data Publishing Framework

The Data Publishing Framework: Components

Five elements that constitute the 'Data Publishing Framework' include: (A) socio-cultural, (B) technical-infrastructure, (C) policy-political, (D) legal environments, and (E) economic investments for supporting various activities of the data publishing cycle (Fig. 1).

Three major technical-infrastructure components, without which meaningful implementation shall remain incomplete are: (i) Persistent Identifiers to data publishers, datasets, the data record itself, as well as to data versioning, and data citation; (ii) a Data Usage Index (DUI) at every access point; and (iii) an effective Data Citation mechanism (Fig. 2).

About GBIF

GBIF makes digital biodiversity data **openly and freely available** on the Internet for everyone, and endorses both open source software and open data access. www.gbif.org

GBIF provides **scientific biodiversity data** for decision-making, research endeavours and public use. data.gbif.org

GBIF is a network of **data publishers who retain ownership and control** of the data they share. Linked datasets provide a more robust representation of biodiversity than any single dataset.

GBIF provides access to primary biodiversity data held in institutions in developed and developing countries. **Data shared through GBIF are repatriated data.**

GBIF is a **dynamic, growing partnership** of countries, organisations, institutions and individuals working together to mobilise scientific biodiversity data.

GBIF invites you to download species occurrence data freely and openly from <http://data.gbif.org>

GBIF invites you to **join** the GBIF network **and share** your biodiversity data, as well as participate in developing **new tools and services.**

A cultural and attitudinal change on the part of scientific publishers, scientific societies, authors, institutions, and funding agencies is required to implement the 'Data Publishing Framework' (Fig. 2).

The Data Publishing Framework: Benefits and Anticipated outcomes

- Incentive for data discovery through data paper
- Incentive for data publishing through 'Data Usage Index'
- Increased management, archival and publishing of primary biodiversity data
- Decentralised implementation of 'Data Publishing Framework' would build the foundation towards 'global research infrastructure' for an open access regime in biodiversity and conservation science
- Recognition to data publishing on a par with scholarly publishing
- Simultaneous publishing of primary data together with scholarly publishing (Fig. 3)

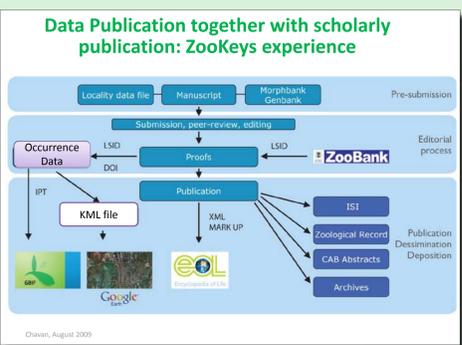


Fig. 3. Simultaneous publishing of primary data and scholarly publishing is feasible.

