

OPEN RESEARCH DATA PLATFORM IN INDONESIA: NATIONAL SCIENTIFIC REPOSITORY

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As an archipelago country, Indonesia has many research resources from natural science (biodiversity) to social science and humanities. It mainly produces scientific articles or prototypes and puts them in a specific repository. *But, how about the raw data?*

In supporting the open data movement, Indonesia made a specific regulation related to the National System for Science and Technology, No.11/2019. Article 40 stated that there is a requirement for scientific data deposit in research activities funded by the government. This law supports the effort of the Centre for Scientific Data and Documentation (PDDI), Indonesian Institute of Sciences (LIPI) after developing the National Scientific Repository (Repositori Ilmiah Nasional/RIN) since 2016. This repository is categorized as an open research data platform (using Dataverse).

Research data cycles are carried out from planning to preservation and reuse. It means the research output at each stage produces data that can be valued as intangible assets. The importance of data preservation could be seen in how 80 percent of original scientific data acquired through publicly funded research is lost within two decades. Scientific work with primary data is essential to improve the quality of research. Therefore, PDDI LIPI focuses on its capacity to support open science through RIN (www.rin.lipi.go.id). The increasing awareness of open data in Indonesia has made researchers put their data into RIN to ensure its accessibility and preservation. RIN, as the focal point, enhances data deposit through FAIR principles to be adopted by Indonesian researchers via basic and advanced training. Another approach is also implemented on the Open Journal System and RIN for its manuscript submission and supplementary files. However, some challenges do arise, from researchers' ignorance because of intellectual property, which has been covered through creative commons licenses and Handle (DOI); to the workload of depositing data, which is why librarians will be the example of functioning research support systems.

Meanwhile, the pandemic situation urges scientific communities to have better interactions, communications, and collaborations, which is borderless. The crisis could be like a blessing in disguise just because it inevitably increases the use of open data platforms and demonstrates the importance of its existence for massive scientific development. RIN Dataverse got more comprehensive engagements by having a role as the data repository for the Indonesian National Health System Consortium, which supports around twentieth institutions in Indonesia in contributing to the reformation of the system for the Pandemic Case. Other practices could be seen in the program entitled Citizen Science – Hackathon for Cultural Assets by engaging the young generations to deposit the cultural data found in their community into RIN. This is one example of how citizen science could have a real engagement to preserve Indonesian traditional culture, for instance, languages (748 local languages), architecture or ethnic groups (633 recognized groups).

On a long-term basis, it could also lead to a satisfactory data-driven policy and decision-making to be conducted and disseminated to Indonesian's and world wide's stakeholders because good research (and policy) needs good data.