Research Data Management @ ICARDA

Q23 Welcome to this questionnaire on research data management (RDM) practices. Thank you for taking the time. We expect that completing this survey will take around 15 minutes.

Q25
 This survey is structured as follows:

- First, we invite you to specify some background information (i.e. the field of science you are working in, as well as your current role).
- Next, we introduce a short description of RDM to ensure a shared understanding of the topic.
- Finally, we ask you to rate agreement to 77 statements on RDM practices, motivations, and regulations.

In case you have any further questions or comments please contact the principal investigators of this study: (anonymous for submission)

If you understood this survey description and you agree to participate, please proceed. Thank you very much!

Q7 **Before we ask about your experiences with RDM, we would like to ask you a few questions that will help in analyzing the data we collect.**

Q28 Which field of science and technology are you **currently working** in?

Please note that the following selection is based on the OECD's Field of Science and Technology Classification.
General category (1)
Specific category (2)

▼ Natural Sciences (1) ... Humanities ~ Other humanities (48)

Q30
In case your background differs from the domain you are currently working in, please respond to the following question:
  Which field of science and technology **best describes your background**?

Please note that the following selection is based on the OECD's Field of Science and Technology Classification.
General category (1)
Specific category (2)

▼ Natural Sciences (1) ... Humanities ~ Other humanities (48)

Q10 What describes you best?

○ I hold no scientific degree (yet). (1)

○ I hold a Bachelor degree. (2)

○ I hold a Master degree. (3)

○ I am a PhD student (4)

○ I completed my PhD (5)

Q22
What describes you best?

I am currently

    ◯ a student (1)

    ◯ working in Industry (2)

    ◯ working at a university (3)

    ◯ working at a research organization (4)

    ◯ a freelancer (5)

Q20 Please indicate which organization / center you are working for:

_____

Q26 **To ensure that all participants have a shared understanding of research data management (RDM), we ask you to read the following introduction first:**

Research Data Management (**RDM**) refers to the **systematic treatment of data**. Data, in this context, describes all types of recorded information, digital and analog, including survey responses, notebooks, measured datasets, software, source code, audio/video recordings, and more.

RDM is concerned with the **documentation, preservation, sharing, and reuse** of data throughout the **entire research lifecycle**, from study design to reporting. Key data tasks include: thorough documentation and annotation; preservation for long-term storage; and sharing with the scientific community or even publicly while respecting privacy and data protection regulations. A key goal of RDM is the reliable sharing of high-quality research data with the scientific community to enable reuse and independent validation (reproducibility).

Any of your current practices in organizing and storing data is part of your **personal RDM. This**

means that everyone, to varying degrees, conducts RDM. A focus of this study is to understand RDM practices that go **beyond the bare minimum of what is needed in your field** of science to conduct research. When responding to the following statements, **please consider RDM through the lenses of activities that allow to make your research open and reusable across a certain community or the public.**

Q12 Please rate your agreement to the following statements.

	Strongly Disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
I need a RDM plan to get funding. (11)	○	○	○	○	○	○	○
I conduct RDM because I profit from my colleagues' resources; I would look bad if I did not return anything. (15)	○	○	○	○	○	○	○
My publications are better with RDM. (10)	○	○	○	○	○	○	○
I conduct RDM because of conference or journal publication policies. (2)	○	○	○	○	○	○	○
I am engaged in RDM because I believe that it increases my visibility and career prospects. (3)	○	○	○	○	○	○	○
If my time spent in	○	○	○	○	○	○	○

RDM does not pay off in increased visibility and citations for my work, I will reduce my efforts. (4)							
I conduct RDM because my supervisors demand it. (1)	○	○	○	○	○	○	○
I conduct RDM because my organization demands it through policies. (5)	○	○	○	○	○	○	○
I feel pressured to conduct RDM. (6)	○	○	○	○	○	○	○
My funding requires RDM. (7)	○	○	○	○	○	○	○
I need to conduct RDM because it is expected of me. (8)	○	○	○	○	○	○	○
My research community requires RDM. (9)	○	○	○	○	○	○	○
I do RDM because selection committees value it highly. (12)	○	○	○	○	○	○	○

I am invested in RDM because it separates me from competing researchers. (13)	○	○	○	○	○	○	○
I conduct RDM because my colleagues would look down on me if I did not. (14)	○	○	○	○	○	○	○

Q14 You are already 20% through the questionnaire!

Q13 Please rate your agreement to the following statements.

	Strongly Disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
My colleagues pressure me to conduct RDM. (1)	○	○	○	○	○	○	○
I feel that my community expects me to conduct RDM. (2)	○	○	○	○	○	○	○
RDM is something natural in my profession. (3)	○	○	○	○	○	○	○
I fear that if I did not do RDM, my colleagues would reduce their efforts as well. (4)	○	○	○	○	○	○	○
I would feel strange if I did not engage in RDM at least as much as my colleagues do. (5)	○	○	○	○	○	○	○
I don't really like to conduct RDM, but we have to follow best practices to advance science. (6)	○	○	○	○	○	○	○
I want my documentation to be at least as thorough as that of my immediate	○	○	○	○	○	○	○

colleagues. (7)							
I am frustrated with bad RDM practices, that is why I try to make a change. (8)	○	○	○	○	○	○	○
My personal principles make me conduct RDM. (9)	○	○	○	○	○	○	○
RDM is the right thing to do for a researcher. (10)	○	○	○	○	○	○	○
RDM is required for research to be transparent to those who pay for it. (11)	○	○	○	○	○	○	○
In my opinion, one should not be called a researcher if she / he does not follow RDM practices. (12)	○	○	○	○	○	○	○
I accept that RDM is simply part of the process. (13)	○	○	○	○	○	○	○
I conduct RDM because it gives me pleasure to know that my research outputs might be used by someone else. (14)	○	○	○	○	○	○	○

| Publications only contain part of the truth; by documenting and sharing my experimental resources and data, I can demonstrate my efforts even better. (15) | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

Q15 Great! 40% done.

Q16 Please rate your agreement to the following statements.

	Strongly Disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
It is wonderful that by conducting RDM I can contribute to the advancement of science. (1)	○	○	○	○	○	○	○
I am excited about others reusing my results. (2)	○	○	○	○	○	○	○
I want other researchers to benefit from my work through RDM. (3)	○	○	○	○	○	○	○
I feel I can make a more significant contribution to research with RDM. (4)	○	○	○	○	○	○	○
I hope that someone else will be able to do exciting research by reusing my shared resources. (5)	○	○	○	○	○	○	○
I want to strengthen the credibility of my work through exemplary RDM. (6)	○	○	○	○	○	○	○

I don't know why I conduct RDM anymore, it feels like a waste of time as no one acknowledges my efforts. (7)	○	○	○	○	○	○	○
Maybe I will not conduct RDM anymore, because I am frustrated by the poor documentation of my colleagues. (8)	○	○	○	○	○	○	○
RDM takes too much time compared to the benefits it brings. (9)	○	○	○	○	○	○	○
It frustrates me that I feel like the only one trying to do a good job at RDM. (10)	○	○	○	○	○	○	○
I don't see a return of my investment in RDM. (11)	○	○	○	○	○	○	○
My organization's RDM infrastructure is suitable. (12)	○	○	○	○	○	○	○
Proprietary formats and software hinder effective RDM in my domain.	○	○	○	○	○	○	○

My organization does not always provide sufficient storage to preserve and share all resources. (14)	◯	◯	◯	◯	◯	◯	◯
I feel that I have all the resources needed to conduct RDM. (15)	◯	◯	◯	◯	◯	◯	◯

(13)

Q17 60% completed!

Q18 Please rate your agreement to the following statements.

	Strongly Disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
The RDM tools I have enable me to manage data efficiently. (1)	○	○	○	○	○	○	○
Conducting RDM is easy using the tools I have at hand. (2)	○	○	○	○	○	○	○
My organization does not have the personnel needed to customize RDM tools for us. (3)	○	○	○	○	○	○	○
I can be effective at RDM with my organization's current technical infrastructure. (4)	○	○	○	○	○	○	○
I don't really know what tools I can use to conduct effective RDM. (5)	○	○	○	○	○	○	○
Researchers in my domain do not currently have the training required to conduct good RDM. (6)	○	○	○	○	○	○	○

I have access to suitable training resources on following RDM practices. (7)	○	○	○	○	○	○	○
I received thorough training in RDM by my organization. (8)	○	○	○	○	○	○	○
Education on RDM was part of the curriculum in my studies. (9)	○	○	○	○	○	○	○
There are best practices for conducting effective RDM in my domain, but I don't really know how to implement them on my own. (10)	○	○	○	○	○	○	○
The procedures involved in RDM are clear to me. (11)	○	○	○	○	○	○	○
My colleagues are generally very knowledgeable about RDM. (12)	○	○	○	○	○	○	○
My colleagues and I implement more structured approaches to RDM because	○	○	○	○	○	○	○

of organizational policies. (13)							
I don't think that I would get a lot of help from my organization if I had problems conducting RDM. (14)	○	○	○	○	○	○	○
My organization employs research data managers who support me in conducting RDM. (15)	○	○	○	○	○	○	○

Q19 Almost done: 80% completed.

Q20 Please rate your agreement to the following statements.

	Strongly Disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
I feel formally obliged to conduct RDM. (1)	○	○	○	○	○	○	○
I think that RDM is part of my work duties. (2)	○	○	○	○	○	○	○
RDM does not seem to be a priority in my organization. (3)	○	○	○	○	○	○	○
I think that we are far away from systematic RDM in my domain. (4)	○	○	○	○	○	○	○
Current RDM practices in my domain suffice to reuse most of the research projects without any problem. (5)	○	○	○	○	○	○	○
Most of my colleagues share their research with me when I ask them. (6)	○	○	○	○	○	○	○
Researchers in my domain share their research openly in	○	○	○	○	○	○	○

	◯	◯	◯	◯	◯	◯	◯
RDM repositories. (7)							
The only way to get research resources usually is to ask the creators directly. (8)	◯	◯	◯	◯	◯	◯	◯
Experimental resources and data shared by colleagues are usually not sufficiently well documented. (9)	◯	◯	◯	◯	◯	◯	◯
Validation and reuse is often not achievable in my domain. (10)	◯	◯	◯	◯	◯	◯	◯
There is no awareness for RDM in my domain. (11)	◯	◯	◯	◯	◯	◯	◯
I enjoy contributing to the RDM culture in my domain. (12)	◯	◯	◯	◯	◯	◯	◯
My colleagues and I share an understanding of the role of RDM. (13)	◯	◯	◯	◯	◯	◯	◯
RDM is part of our domain's research	◯	◯	◯	◯	◯	◯	◯

culture. (14)							
There is no appreciation for RDM in our domain. (15)	○	○	○	○	○	○	○
I don't think that my colleagues care about RDM. (16)	○	○	○	○	○	○	○
I can see no benefits to RDM in our domain. (17)	○	○	○	○	○	○	○

Q21 Thank you very much! Please proceed to save the data.