

Networking activities by the FAIRagro Helpdesk ... and how researchers will profit from it

March 3rd, 2025

Elena Rey Mazón and Marcus Schmidt representing the FAIRagro consortium



Pixabay [Content License](#)

Leibniz Institute of Plant Genetics and Crop Plant Research (IPK)
&
Leibniz Centre for Agricultural Landscape Research (ZALF)



project number 501899475

In cooperation with



Index

1. What is FAIRagro?
2. What does the FAIRagro Helpdesk do? Who are we?
3. Why are all these connections important for researchers and the community?
4. How will the researchers benefit from it?

What is FAIRagro?

FAIRagro is the NFDI consortium for the **agrosystem sciences**.

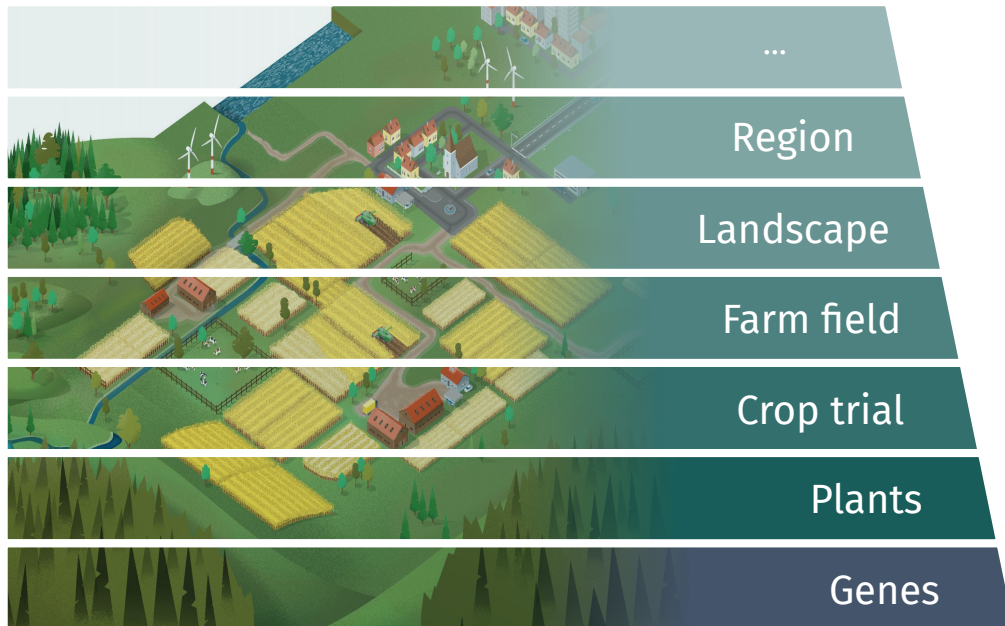
With the FAIR principles, we aim to enhance collaboration, accelerate research progress, and address global challenges related to food security, climate change, and sustainable agriculture.

NFDI: The National Research Data Infrastructure (NFDI) aims to make data from science and research available, network it and thus make it usable in the long term. Institutions from various research areas are involved in the NFDI. They are working on services, training opportunities for researchers and standards for handling data.

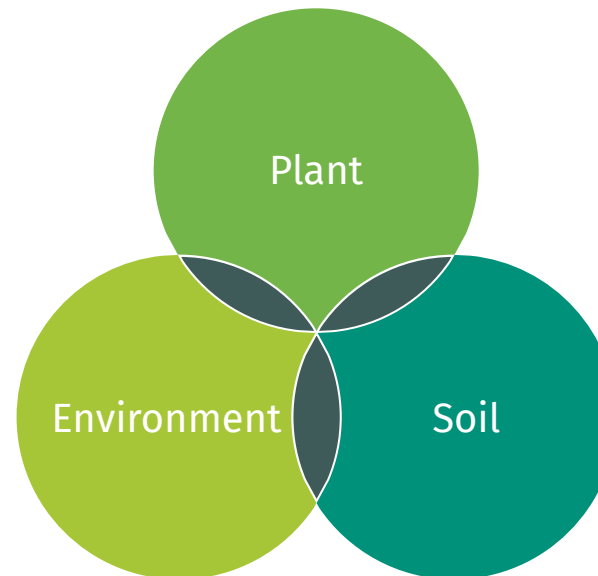
Agrosystems: Crop production, ecosystems and landscapes whose sustainable management and development are based on systems understanding of plant-soil-environment interactions, taking into account cross-scale processes and relationships

FAIRagro domain: scales, disciplines and data categories

Scales



Subjects and disciplines



Data categories



The DSSC - FAIRagro's Helpdesk Team

What is exactly the DSSC?

The Data Steward Service Center (DSSC) provides support and guidance on research data management in agricultural sciences, ensuring compliance with FAIR (Findable, Accessible, Interoperable, Reusable) principles.

The DSSC channels the questions from the community, connects researchers with relevant expertise, and provides tailored guidance on FAIR data management practices in agricultural sciences.

Who are we?

Wahib



Data Publication
 Long-term- experiments
 DOI
 Metadata
 ...

Elena



Plant Breeding
 Data management
 plan (DMP)
 MIAPPE
 ...

Marcus



Koordination
 NFDI Networking
 Data Science
 ...

Lea



Law & ethics
 Intellectual Property
 Copyright
 Data Privacy
 General Contracts
 ...

Lucia



Farming 4.0
 Field robotics
 Visualization
 ...

What do we do?



Research Data Management in Agricultural Sciences - Advanced module: Data documentation

10 December 2024

Sabrina Jordan – Research Data Service of the University of Kassel
 Sophie Boße, Lucia Vedder and Gabriel Schneider in the name of the FAIRagro consortium

ZB MED Information Centre for Life Sciences, Rheinische Friedrich-Wilhelms-Universität Bonn



Handling and organizing plant phenotyping data - a workshop on Research Data Management

15.01.2024

Sophie Boße, Lucia Vedder, Ireneusz Kleppert im Namen des FAIRagro Konsortiums
 Annika Bonerath, Franziska Kübel im Namen von PhenoRob

ZB MED Information Centre for Life Sciences, Rheinische Friedrich-Wilhelms-Universität Bonn,
 Forschungszentrum Jülich



Maximizing the Potential of Agricultural Research Data:

A Guide to Crafting an Effective Data Management Plan and Using ELNs - Day 1

Daniel Wibberg, Helena Schnitzer - de.NBI
 Sophie Boße, Elena Rey Mazón, Wahib Sahwan, Gabriel Schneider in the name of the FAIRagro co

ZB MED Information Centre for Life Sciences, Leibniz Institute of Plant Genetics and Crop Plant Research



What to do with my agricultural research data?

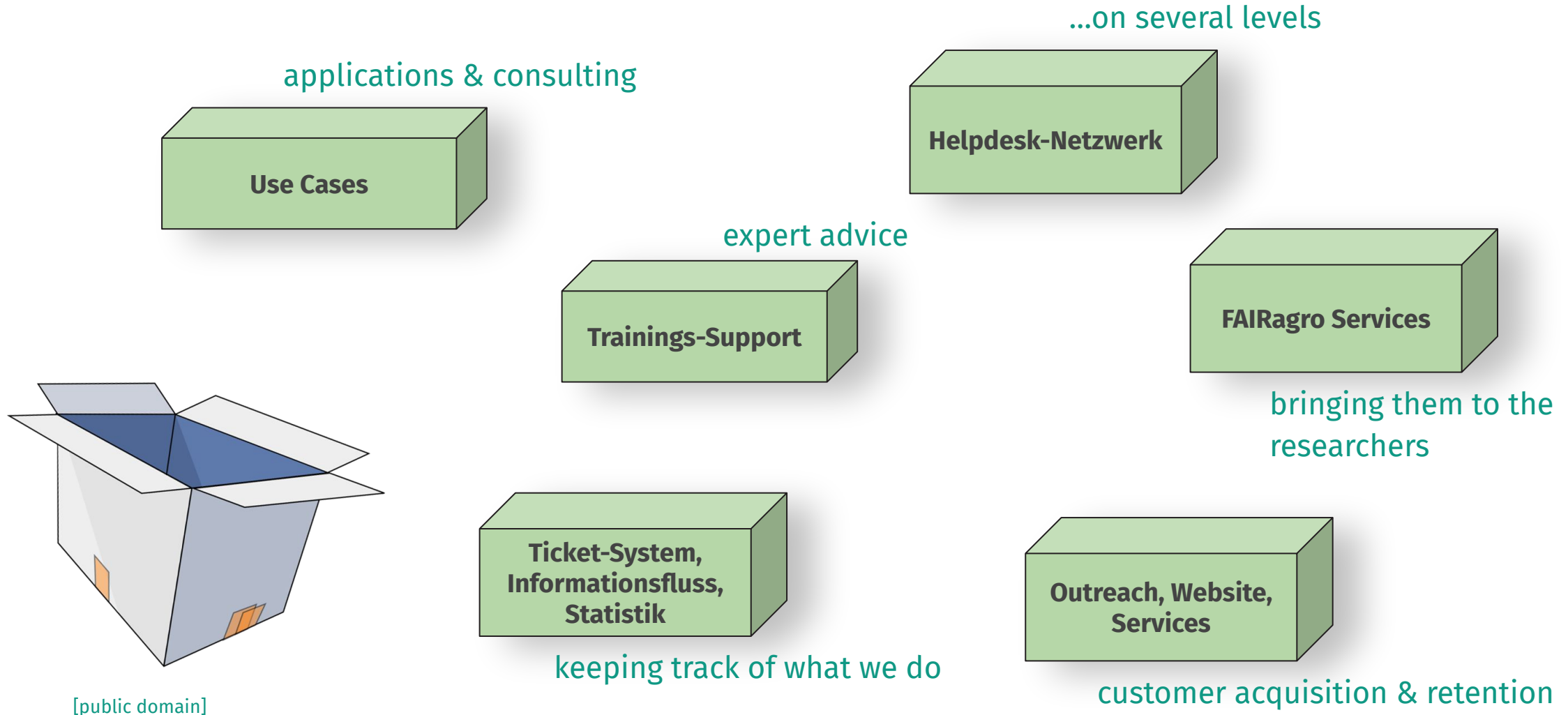
28.06.2024

Sophie Boße, Lucia Vedder representing the FAIRagro Konsortium
 Roberto Cozatl, Martin Scheuplein representing the University and State Library of Saxony
 Anhalt at the MLU

ZB MED Information Centre for Life Sciences, Rheinische Friedrich-Wilhelms-Universität Bonn

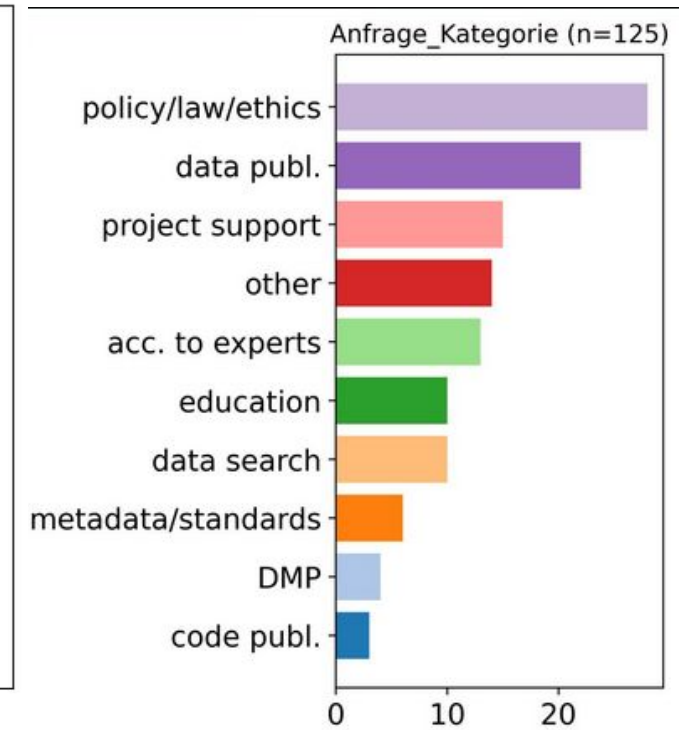
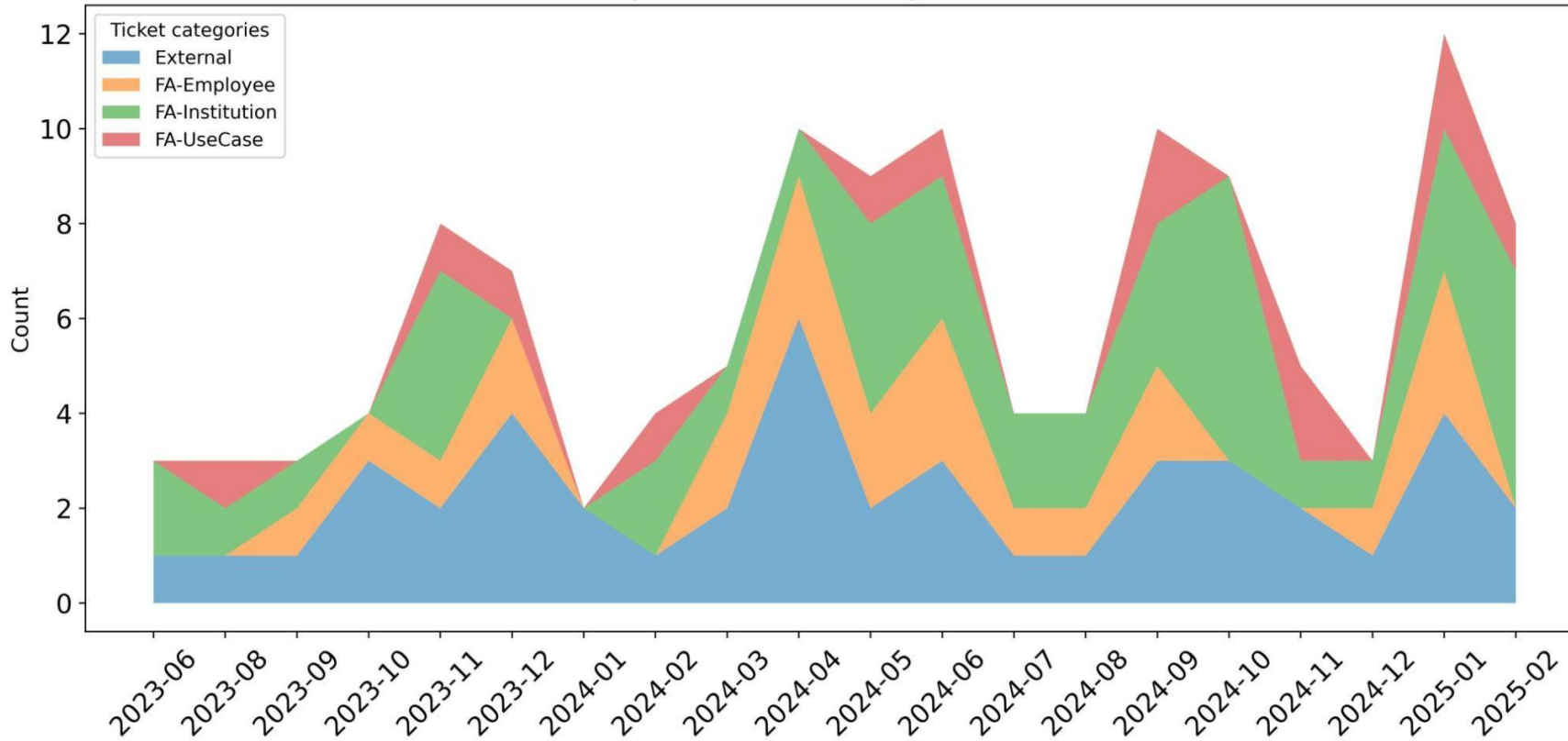


There's more inside... our Task Forces



Some stats...

Development of Ticket Categories Over Time

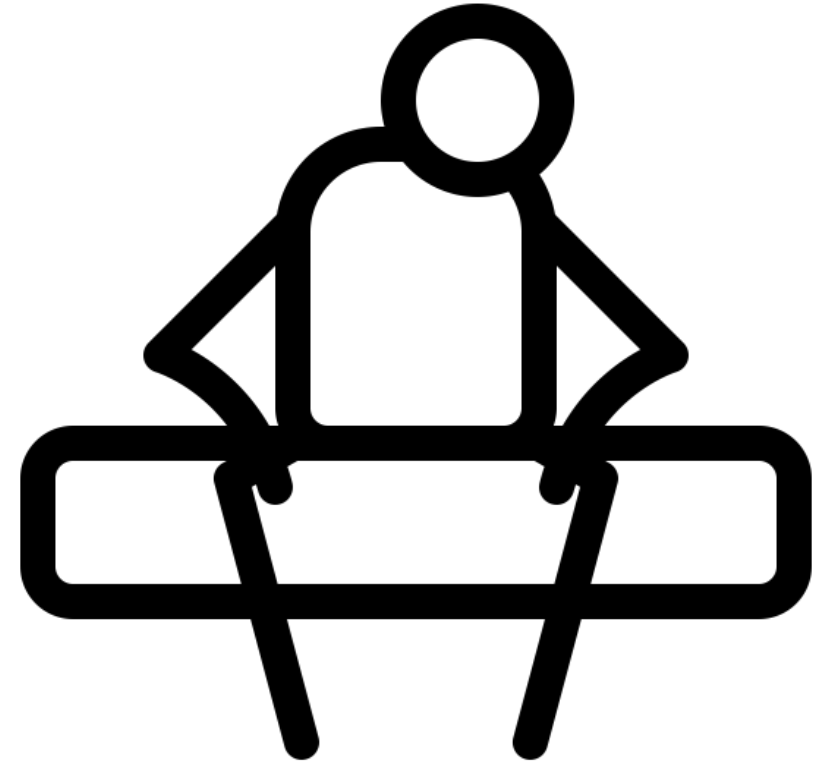


Why are all these connections
important for researchers
and the community?

What happens if you ...

... don't have anyone to talk about it?

- You spend weeks for researching methods, protocols & standards
- You may not realize that **YOUR DATA IS IMPORTANT FOR SCIENCE!**
- You may publish your data in a repository where no one may find it
- it's also no fun =)



Created by IconMark
from Noun Project

Source: [alone](#) by IconMark from Noun Project (CC BY 3.0)

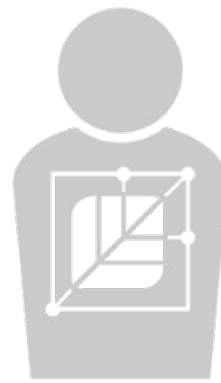
What happens if you ...

... have someone, but that person is not well connected?

That's much better ... but not everyone knows everything.



You



Data Steward

That's a very specific question... hold on, I will have to look it up myself

What happens if you ...

... have a group of Data Stewards that help you to reach a useful answer?

SOMEONE in the network will have the best answer for you.

Ideally, you don't have to worry about how your request gets there.

THE DETAILS, HOWEVER, ARE TRICKY!

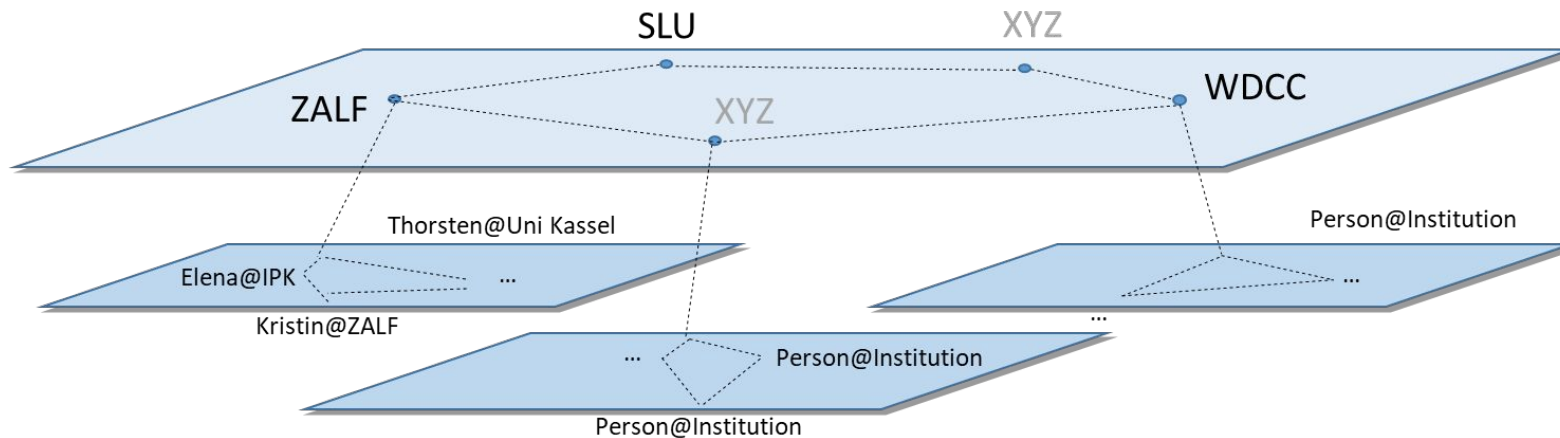


[generated with AI, Copilot 2025]

Taking it further ...



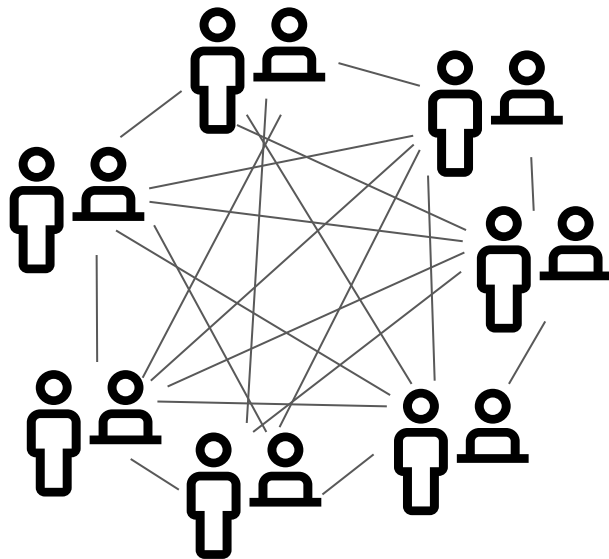
Associated Data Steward Network Agriculture



EUROPEAN LEVEL
Contact Points

NATIONAL LEVEL
Associated Data Stewards

... and further ...

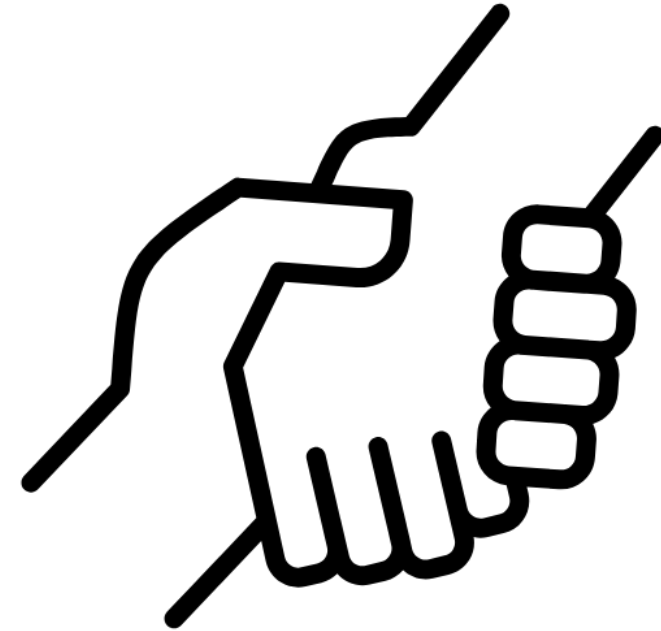


Stay tuned for **Support4RDM** - a base service proposal to connect helpdesks and provide a helpdesk catalogue as an online platform to search and find helpdesks in Germany from all fields and institutions.

How will the researchers
benefit from it?

Where can we help?

1. Find a Repo to download or publish data
2. Get help in Legal Issues
3. Find specific tools & support for project proposals



Created by Purple iconn
from Noun Project

Source: [help](#) by Purple from Noun Project (CC BY 3.0)

Find a Repo to publish or download data

1- Ticket from customer:

I was looking for field experimental data about legumes, in particular lentil and chickpea, in Europe, to calibrate a crop model (MONICA) on this data.

1- Reply from Data Steward:

After a search for data on experiments with lentils and chickpeas, we are sending you a selection of those we have found that may be of help to you.

Find a Repo to publish or download data

Link	Description / Titel	Where does it come from?	Comments	
https://datadryad.org/stash/dataset/doi:10.5061/dryad.w3r228101#methods	Phenotyping data from: Genetics of phenological development and implications for seed yield in lentil	Australian Universities	Lentils. Paper & Data	
https://datadryad.org/stash/dataset/doi:10.5061/dryad.tx95x6b0f	Chickpea flowering, carbon isotope, seed weight in a factorial of 20 genotypes and 8 environments	Australian Universities	Chickpea Data	
https://datadryad.org/stash/dataset/doi:10.5061/dryad.rr4xgxd5w	Contrasting patterns in biomass allocation, root morphology and mycorrhizal symbiosis for phosphorus acquisition among 20 chickpea genotypes with different amounts of rhizosheath carboxylates	China and Australia Unis	Chickpea Data	
https://tools.bonares.de/tfe/lte-details/376/	Giessen long-term field experiment 'biological nitrogen fixation'	Uni Giessen	Daten (teilweise?) über BonaRes verfügbar (s. Links), allerdings viele Bodendaten Falls der Datensatz passend ist, möglicherweise über Wahib weitere Infos/Daten/Kontakt möglich?	
	--> LTE u.a. mit Leguminosen			
	treatment plots			https://maps.bonares.de/mapapps/resources/apps/bonares/index.html?lang=en&doi=5cc34bf0-657a-49c7-8198-57ad9ad8341f
	soil nitrogen content			https://maps.bonares.de/mapapps/resources/apps/bonares/index.html?lang=en&mid=ec8e0e27-4603-406c-9e10-0bb5790341ee
	soil pH			https://maps.bonares.de/mapapps/resources/apps/bonares/index.html?lang=en&mid=ea23e21e-ae08-497e-a3e0-623ec18b5745
	stable carbon isotope ratios in soil			https://maps.bonares.de/mapapps/resources/apps/bonares/index.html?lang=en&mid=f4e91c32-f475-43cf-ba3c-f2c4d887660a
	soil electrical conductivity			https://maps.bonares.de/mapapps/resources/apps/bonares/index.html?lang=en&mid=108d410a-aa51-4176-8384-3b6dd67812e6
	soil bulk density			https://maps.bonares.de/mapapps/resources/apps/bonares/index.html?lang=en&mid=bc0a8c94-d8fd-41b6-b825-672d41a682a4
	stable nitrogen isotope ratios in soil			https://maps.bonares.de/mapapps/resources/apps/bonares/index.html?lang=en&mid=eb634f1f-e9c6-4721-b1f9-773c9b354f28
	soil organic carbon content			https://maps.bonares.de/mapapps/resources/apps/bonares/index.html?lang=en&mid=ffac6529-0d0c-4bdd-93b8-6922c09d6267

Find a Repo to publish or download data

2- Ticket from customer:

Which repository do I choose for metabolome (targeted GC-MS, LC-MS) and proteome data from crop production trials? Is the **MassiVE** repository suitable?

2- Reply from Data Steward:

We would like to recommend the **e!DAL-PGP** repository (<https://edal-pgp.ipk-gatersleben.de>). e!DAL-PGP is specifically geared towards plant research data.



Find a Repo to publish or download data



Toolbox

If you work with agricultural research data, want to find out more about it, search for it, publish it or manage it, you've come to the right place. We have compiled overviews and instructions to support you in dealing with such data and its special features. Our toolbox is up to date and is constantly being expanded. If you have any ideas or suggestions for further contributions, please contact us via our [helpdesk](#).

**Publishing research code
FAIR – a roadmap**

**Facts on Facts – Data
Types in Agrosystem
Science**

**Where to find a fitting
repository?**



Checkout the [FAIRagro Toolbox!](#)

Get help in Legal Issues

Tickets from customers:

1. Prepare a **data policy**, assistance in terms of legal issues.
2. Legal advice/support in relation to the **publication** of data records.
3. Question about advice on **licences**.
4. **Data protection** clause to publish a document.
5. ...

Lea, our Legal Eagle, is one of the data stewards with the most Helpdesk tickets!!

Why not only data, but also groups of people are to be protected

26. June 2024

Sharing is CAREing – now more than just „Goodwill“: Trust is good, legal certainty is better. The World Intellectual Property Organization (WIPO) thought so too. On May 24, 2024, it enshrined elements of the CARE principles in an international treaty for the first time. Here I explain why this is a significant step in international... [Read more](#)

Knock Knock: who's there? – The Reform Of The Genetic Engineering Laws?

14. May 2024

Genetic engineering. For some it's the sleep paralysis demon, for others the holy grail. Granted, it's not as dramatic. However, the gene scissor is not the only one separating. The topic is discussed heatedly across politicians, scientists and consumer advocates, and not just nationally. Only recently the pot has been stirred again by the decision... [Read more](#)

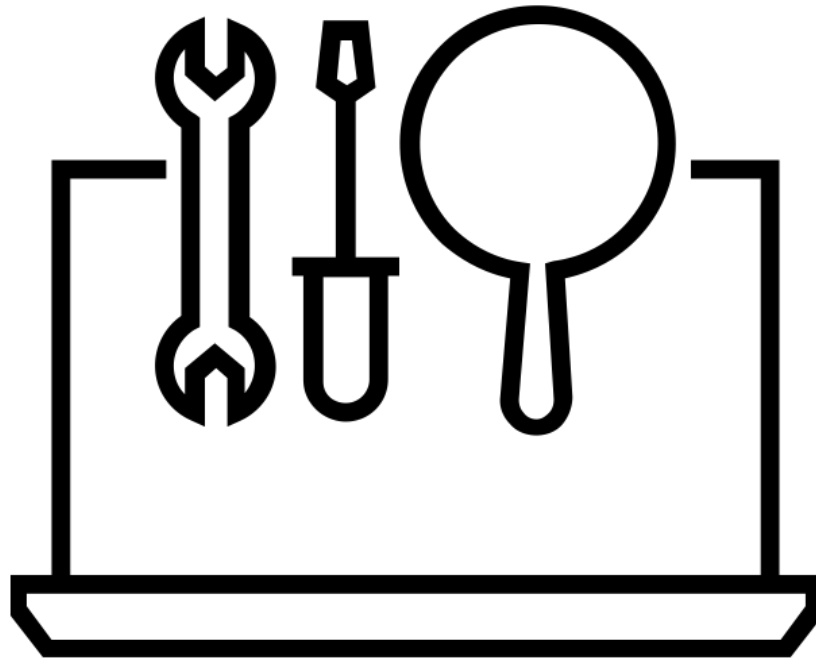
Copyright as the final boss

12. April 2024

Friend or foe for scientists? Our first Legal Workshop earlier this week was a full success! Since there have been lively discussions around the presented topics regarding the German copyright, I want to use this legal column again to dive into the deep sea of the German copyright law and the data licenses. German copyright:... [Read more](#)

More entries in the [Blog](#) available!

Find specific tools & support for project proposals



Created by Creative Stall
from Noun Project

Source: Online Advertising Research tools by Creative Stall from
[Noun Project](#) (CC BY 3.0)

Types of tickets we have received about this topic:

1. Request for **correction** of the **RDM** section of a project application for the BMBF.
2. What **competencies** are needed to **store data** from a research network in such a way that they can be used in the long term by other participants in this network -> long term storage.
3. Receiving advice on research data management and setting up a data policy for a new project.
4. ...

FAIRagro Knowledgebase

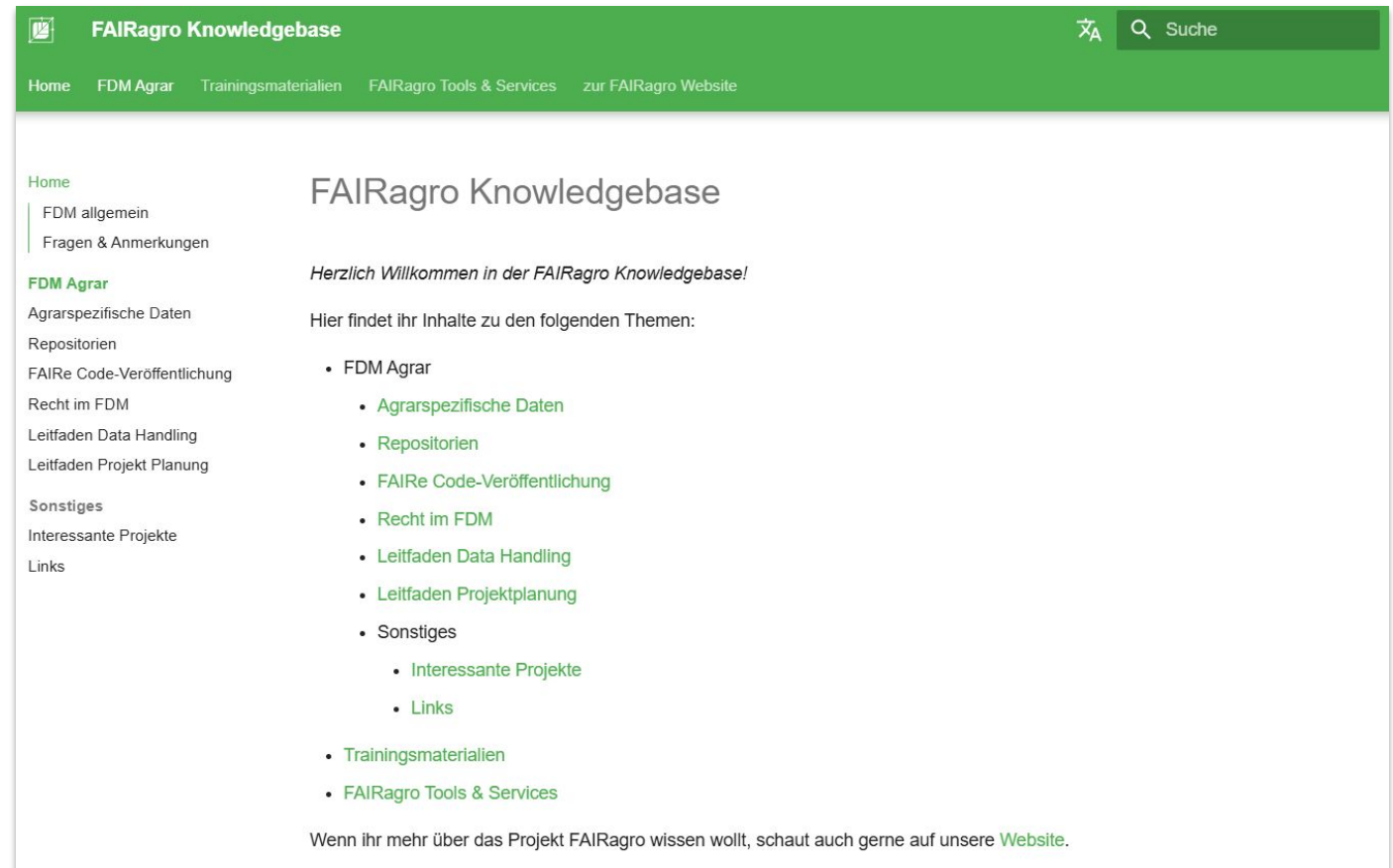
Giving it back to the community



specific questions

essential answers

Pixabay [Content License](#)



FAIRagro Knowledgebase

Home FDM Agrar Trainingsmaterialien FAIRagro Tools & Services zur FAIRagro Website

Home

- FDM allgemein
- Fragen & Anmerkungen

FDM Agrar

- Agrarspezifische Daten
- Repositorien
- FAIRe Code-Veröffentlichung
- Recht im FDM
- Leitfaden Data Handling
- Leitfaden Projekt Planung

Sonstiges

- Interessante Projekte
- Links

FAIRagro Knowledgebase

Herzlich Willkommen in der FAIRagro Knowledgebase!

Hier findet ihr Inhalte zu den folgenden Themen:

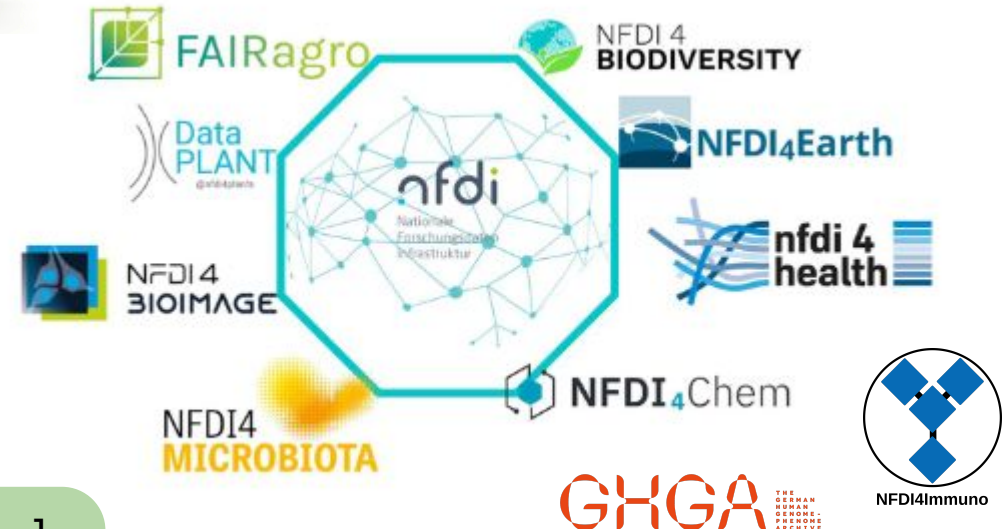
- FDM Agrar
 - Agrarspezifische Daten
 - Repositorien
 - FAIRe Code-Veröffentlichung
 - Recht im FDM
 - Leitfaden Data Handling
 - Leitfaden Projektplanung
- Sonstiges
 - Interessante Projekte
 - Links
- Trainingsmaterialien
- FAIRagro Tools & Services

Wenn ihr mehr über das Projekt FAIRagro wissen wollt, schaut auch gerne auf unsere [Website](#).

Support within our Geo-Chem-LifeScience Network

In FAIRagro we received a ticket asking whether there is some sort of **database/inventory of standard protocols** for research methods similar to the EPPO standards [...] Or, if not, what would be a "FAIR" approach to documenting the methods as metadata?

What kind of research methods is meant here? [...] I know that the **DSMZ has a database for Strain cultivation methods**, and there is a **repo for SOPs** in laboratories.



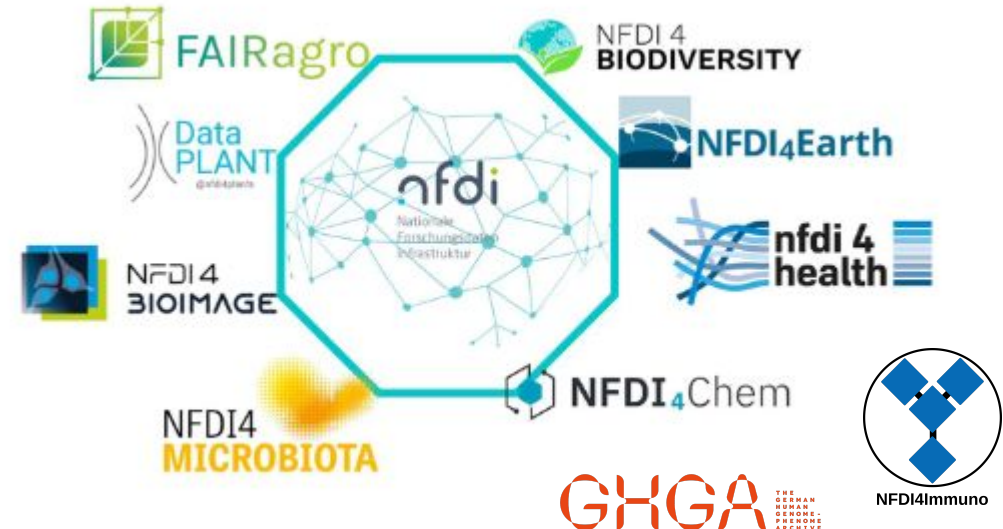
Support within our Geo-Chem-LifeScience Network



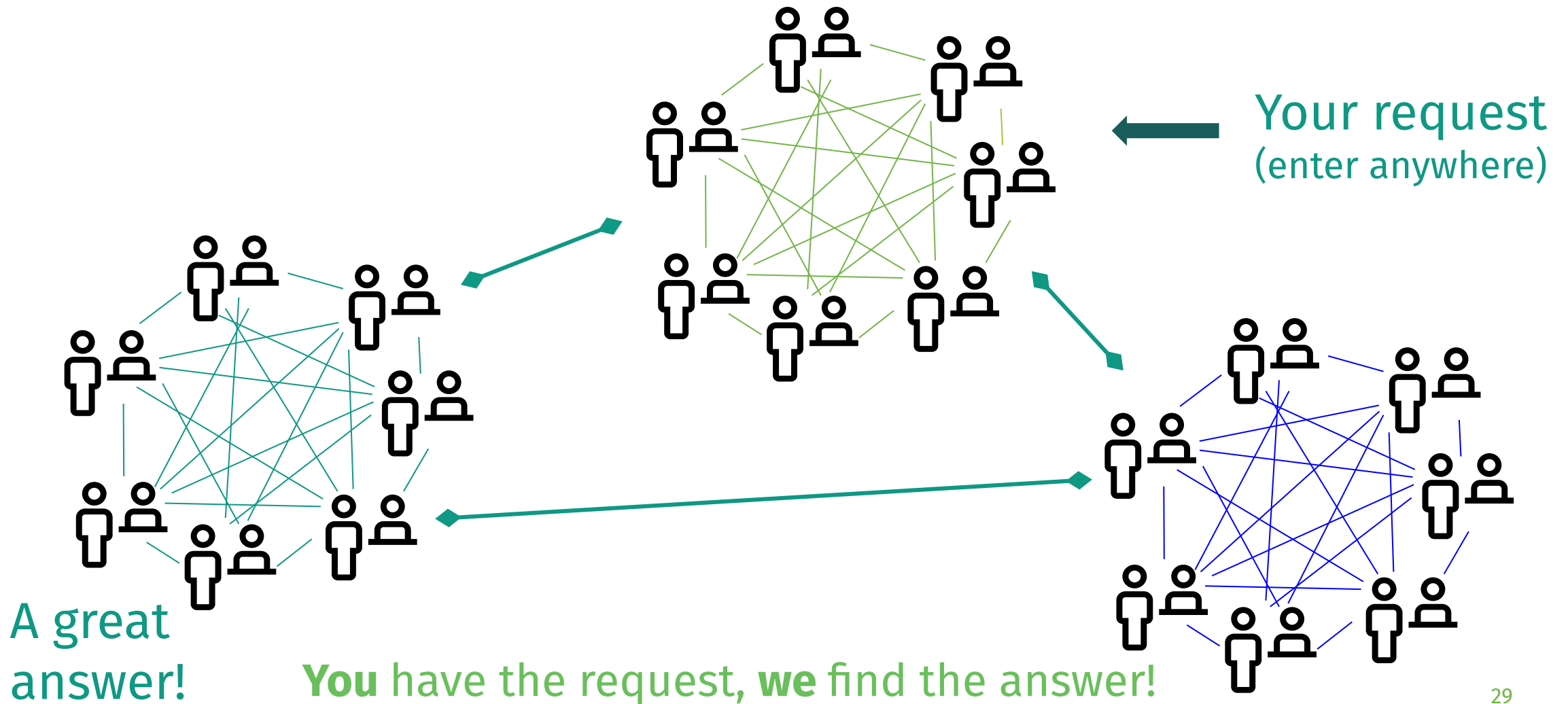
A colleague asks if you know of **lists of persistent, recommended file formats** that can be recommended to people for FDM and last for decades.

4Earth has a guideline from TaskArea 2.5 "Data in Long-Term Storage"
<https://doi.org/10.5281/zenodo.13837989>
chapter 6 and appendix are about file formats

Maybe **this table** is also helpful:
<https://www.publisso.de/forschungsdatenmanagement/fd-archivieren>



In the end ... a network of networks



Thank you!

... and if you want to learn more about us, our knowledgebase will be ready soon!



fairagro.net/
helpdesk



Expertises:

- Soil data
- General field data
- Genetic data (“omics data”)
- Phenotyping data
- Field robotics & sensor data
- Big geodata
- Legal framework

<https://doi.org/10.4126/FRL01-006461782>

Stay tuned for our next FAIRagro talk:



 **FAIRagro Talk**
Monday Motivation

Monthly,
every 1st Monday
at 2 pm
online

Next-Generation Environmental and
eXtended Tools for Extreme Events &
Plant Resilience Assessment

7 April 2025, 2:00 - 3:30 PM
www.fairagro.net/fairagro-talk


Amit Srivasrava


Kaushik Reddy
Muduchuru