

2nd FAIRragro Use Case Call

FAIRragro – an introduction

FAIRragro is a community-driven initiative within the National Research Data Infrastructure (NFDI). Our mission is to establish an interoperable and scalable research data infrastructure and services that advances FAIR (Findable, Accessible, Interoperable, Reusable) research data management (RDM) and to support the cultural change towards collaborative RDM practices. FAIRragro aims to foster highly interdisciplinary and multiscale research in agroecosystem-related sciences, a field of immense societal relevance. By doing so, FAIRragro will contribute to achieving the United Nations Sustainable Development Goals (SDGs) and addressing major societal challenges of our time, such as climate change, biodiversity loss, and sustainable resource management.

Our goal is to support agricultural scientists with FAIR RDM by building infrastructures and services tailored to their needs. Through this effort, we strive to make FAIR practices the norm, increasing openness and integrity of research. We aim to empower researchers to share their work transparently and ensure data is discoverable and (re)usable across disciplines. As part of the broader NFDI mission, FAIRragro is committed to building a scientific future where FAIR data practices are recognized, rewarded, and integrated into innovative research.

Objectives of FAIRragro Use Cases and focus of the UC call

FAIRragro Use Cases are practical examples that describe and address specific challenges in RDM within agricultural sciences as well as develop and test potential solutions. They enable FAIRragro to collaboratively tackle the diversity and heterogeneity of agricultural data—ranging from drone imagery and gene sequences to farm surveys—as well as the broad range of relevant temporal and spatial scales, e.g. from the molecular and genetic level to entire landscapes.

A key objective is to avoid isolated, stand-alone solutions and instead develop adaptable, community-driven approaches that are relevant and beneficial for the entire agricultural research community and beyond. Through these Use Cases, FAIRragro ensures that its data infrastructures, tools, and services align with real-world research needs, enhancing daily scientific practices. Moreover, they contribute to more efficient and impactful research, foster cross-disciplinary collaboration, and extend beyond agroecosystem science to broader agricultural sciences and related fields as well as neighbouring disciplines and domains.

The Focus of the 2nd UC Call

For the 2nd UC Call with FAIRragro Use Cases, the following objectives are pursued:

- **Demonstrate FAIR practices:** Use proof-of-concept to demonstrate that applying FAIR principles and establishing FAIR practices will lead to more collaborative, efficient and innovative agricultural research, and contributing solutions for today's societal challenges.
- **Develop and implement solutions:** Create practical approaches based on FAIRragro concepts, infrastructures, and services to address specific research data management (RDM) challenges. These solutions must prioritize interoperability and scalability to ensure broad applicability across disciplines and strictly avoid building isolation solutions.
- **Foster cultural change:** Establish FAIR data management as the normative standard in agricultural research and strengthen acceptance through proven best practices.
- **Broaden the community:** Engage new disciplines and/ or institutions and expand integration into agricultural science and beyond (including neighbouring and new disciplines and domains, e.g. animal-related sciences, forestry).
- **Strengthen interdisciplinary and (inter-)national collaboration:** Foster cross-consortium partnerships within NFDI and cooperation with relevant RDM as well as (agricultural) research initiatives, networks and projects.

Details of the UC Call and application procedures

The second FAIRagro Use Case Call invites representatives from new disciplines and institutions to submit innovative proposals, strengthening the consortium and expanding its reach in agricultural research. The aim is to enrich the FAIRagro community with forward-thinking projects, engaging new partners and broadening the scope from traditional agroecosystem research to encompass (inter)national agricultural sciences and beyond. Details on prerequisites and eligible Use Case formats can be found in the section: *'Eligible Use Case Formats'*.

Furthermore, collaboration with other NFDI initiatives and relevant interdisciplinary and or (inter)national RDM and agricultural science initiatives, networks and projects is becoming increasingly important—both in light of the current funding phase of the NFDI and in response to international developments, such as those surrounding the European Open Sciences Cloud (EOSC).

However, UC applicants or applying institutions must be German legal entities, representing research-oriented institutions or entities engaged in research-related activities. All involved institutions must either be FAIRagro co-applicants, participants, or commit to becoming participants, thereby expanding the consortium. Further details are available in the section *'Eligible Parties and Stakeholders'*.

Accepted Use Cases will become an integral part of the FAIRagro consortium. Use Cases are integrated into the consortium's work plan, entailing collaborative efforts with the FAIRagro Task Areas (TA) (see Fig. 1) and are intended to accomplish specific Measures and Deliverables over a predetermined duration. A description of the FAIRagro's Task Areas and Measures is available at the [FAIRagro website 'Our Task Areas'](#). Additionally descriptions and progress reports of current FAIRagro Use Cases are summarized at the [FAIRagro website 'Our Use Cases'](#) including the UC map - an visualization of used/ applied/ implemented 'infrastructures', 'data resources', 'semantic resources' and 'workflows' - provides details on what is covered by the current active use cases already, where are gaps and possible points of connection for future Use Cases.

Use Cases can be financed according to the DFG regulations and the FAIRagro Flex Fund rules. Further information is available under the section *'Funding conditions and details'*.

Evaluation criteria reflect the focus of the 2nd UC Call and will be given special consideration during the review process. All evaluation criteria are listed in *'Appendix 1: Summary of Application Requirements and Evaluation Criteria'*.

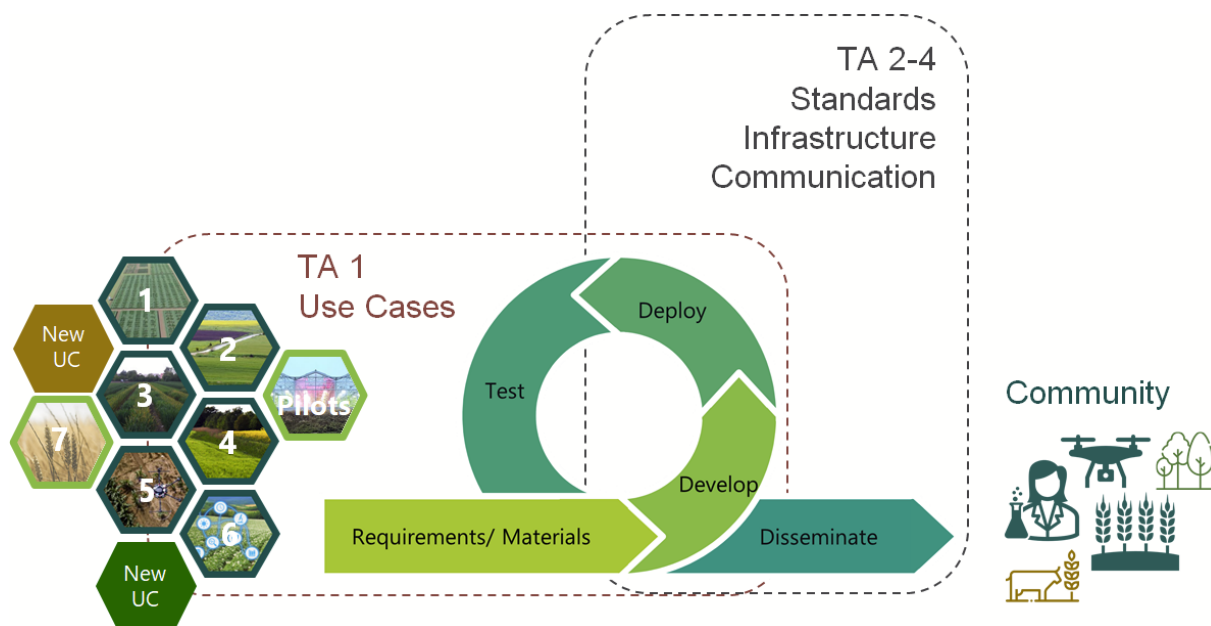
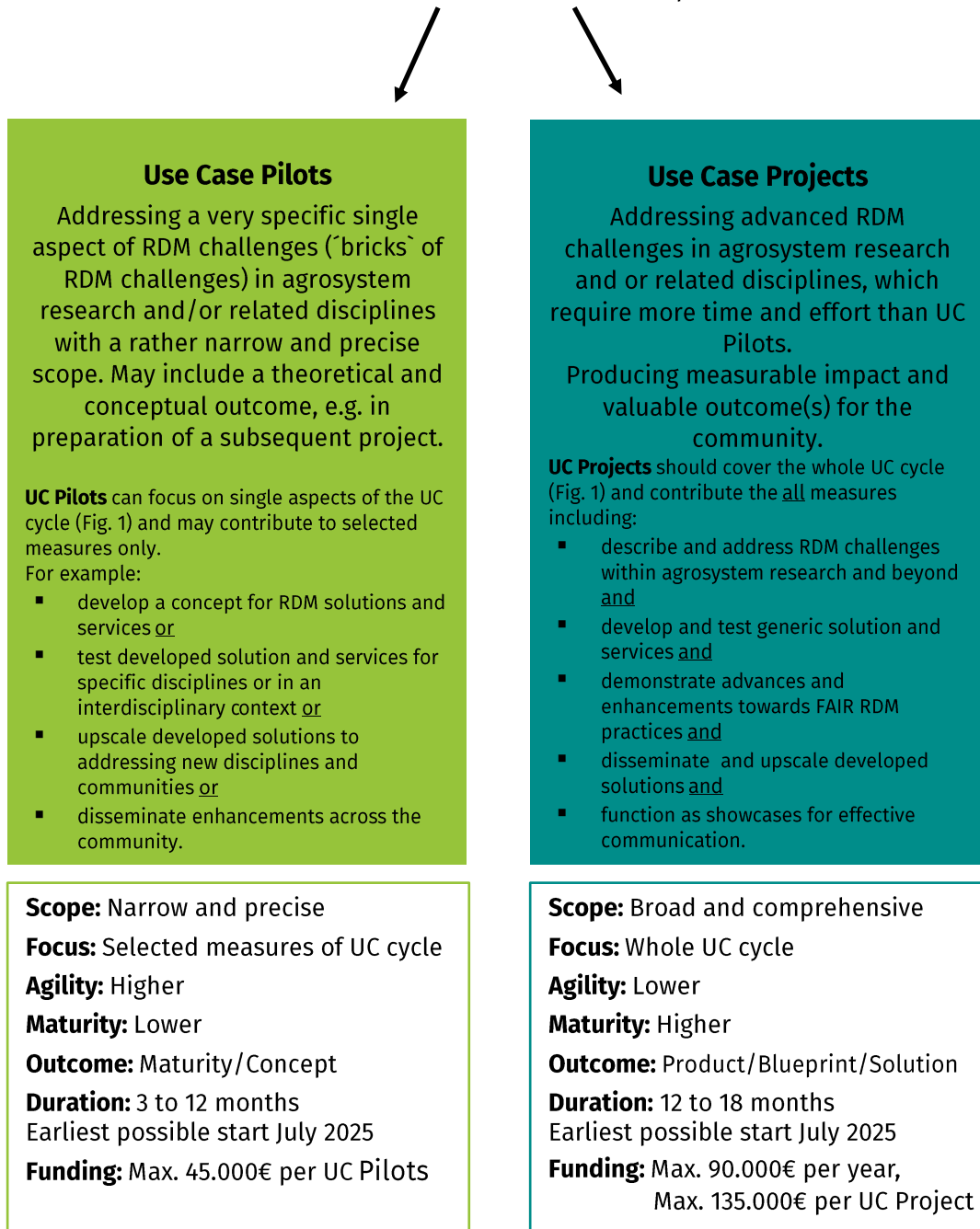


Figure 1: UC cycle demonstrating the interplay of FAIRagro TAs with the UCs and the community.

Eligible Use Case Formats

In order to meet the needs of the community and demands of an agile project management, two different **Use Case formats** are accepted.



The table presents the most important differences between the two UC formats. UC Pilots and UC Projects are required to build upon FAIRagro concepts, infrastructures, and services. **Application, evaluation procedure, timelines, eligibility requirements and funding details are similar and can be applied for both UC formats.**

Eligible parties and stakeholder

Eligible Use Cases deal with current RDM challenges within agricultural science and/ or related disciplines/domains. Parties eligible to participate represent research-oriented institutions or entities engaged in research-related activities. Furthermore, they must be national (German) legal entities and thus eligible to apply according to DFG requirements, including but not limited to:

- Universities and universities of applied sciences
- Non-university research institutions, including governmental and state research bodies
- Public and state infrastructure and service providers
- Professional societies and associations
- Governmental or administrative authorities
- NGOs, Think Thanks

Each Use Case application must identify one main applicant institution. However, additional co-applicant institutions are welcome and encouraged. **Applying institution(s) are required to be part of the FAIRagro consortium or to become a new FAIRagro Participant¹, respectively.**

Collaborations with further `associated partners` are possible. Associated partners must not become FAIRagro Participants or fulfil the respective prerequisites but are excluded from receiving FAIRagro funding. Examples for associated partners are:

- Private infrastructure and/or service providers
- Industry, companies
- Farms, agricultural enterprises

A Letter of Intent (LoI) or a Letter of Commitment (LoC) may underline the scope of collaboration.

Funding conditions and details

FAIRagro Use Cases are financed via FAIRagro Use Case funding and/or as in-kind contributions. Regardless of financial support, all Use Cases can benefit from FAIRagro infrastructures and services. The evaluation and selection of UC Pilots and Projects is subject to the availability of financial resources and the presence of essential FAIRagro resources for the successful implementation.

Funding period

The funding period ranges from three to 12 months for UC Pilots up to 18 months for UC Projects. The earliest possible start date is July 2025, contingent upon successful administrative onboarding. The funding period is limited to the years 2025 and 2026.

Funding

Funding up to 45,000€ for UC Pilots, and up to 135,000€ for UC Projects (90,000€ per year) for personnel necessary for the successful implementation of UC (e.g., Postdoc, PhD student, student assistant). For material expenditures standard rates of 4.000 € / calendar year (travel costs, room rent / material for events) are provided per successful Use Case. Applications for and use of funds are limited to the corresponding calendar years. Once approved, funds cannot be deferred to future budget years. Basic equipment, PCs and instruments are not covered, nor are external services or software development expenses. Furthermore, it is important to note that the development of isolated solutions or institution-specific infrastructures will not be funded, as the focus is on fostering collaborative and integrative solutions aligned with FAIR principles and based on FAIRagro concepts, infrastructures and services

¹ Becoming a FAIRagro Participant: The new UC applicant institution must provide a letter of commitment (LoC) along with a short application form describing how the institution continuously contributes services and activities of FAIRagro (templates will be provided). Subsequently, approval is required from both first the FAIRagro Steering Committee and second the DFG. Finally, an addendum to the existing consortium contract (`Konsoritalvertrag`) will be prepared and must be signed by the head of the applicant institution.

Timeline

Admission of new Participants:	Continuously
Announcement of the UC Call 2024:	20.01.2025
Public presentation of the UC Call + Q&A:	06.02.2025 9am, online via Zoom
UC applicant consultation via DSSC:	Continuously through dataservice@fairagro.net
Application deadline:	03.03.2025 6pm
Announcement of UC selection:	End-May 2025
Onboarding of new UCs:	From July 2025
UC funding period and operation:	From July 2025 for max. 18 months until the end of 2026, funding is limited to 2025 and 2026
FAIRagro Annual Plenary:	29.09-01.10.2025, Berlin

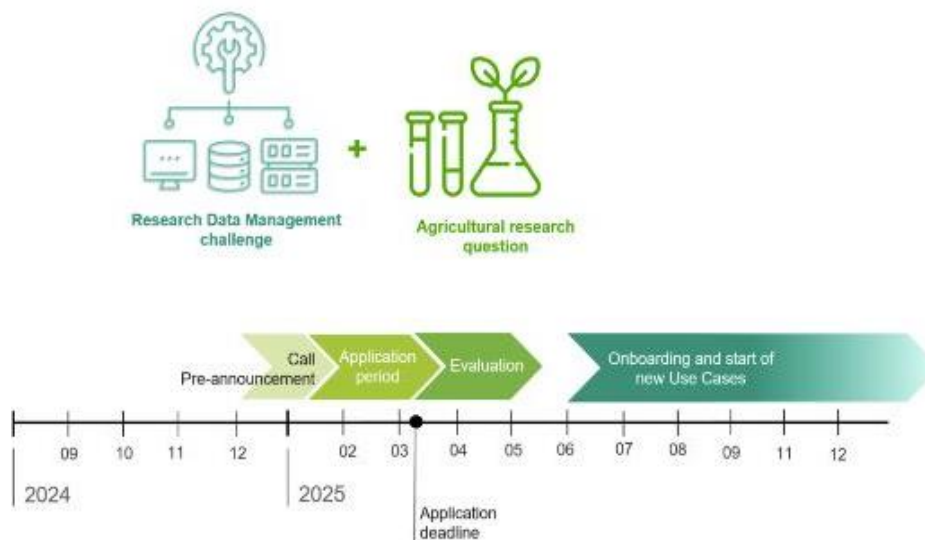


Figure 1: Timeline and deadlines for the second FAIRagro Call

Application Documents

- FAIRagro UC Submission Form, available at [FAIRagro 2nd UC Call website about with the Submission Form as Download](#)
- Additional application appendices (recommended) **Letter of Agreement/Intent** for new institutions (including all UC (co-)applicants and associated partners) that are not yet FAIRagro (co-)applicants or participants.

Applicants are required to submit the completed FAIRagro UC Submission Form (in English), along with any applicable appendices, via email to UC_fairagro@listserv.dfn.de by 3rd March 2025, 6 pm.

For questions regarding the UC Call and Onboarding, please directly reach out to Dr Anne Sennhenn through asennhenn@atb-potsdam.de.

For further advice and consulting in preparation of the UC proposal, please consult with our [Data Steward Service Center \(DSSC\) team/ FAIRagro Helpdesk](#).

Application preparation

During the application period, we encourage interested parties to attend the [open presentation of the 2nd Use Case Call and the accompanying Q&A session](#). This event will provide detailed information about the current call and address frequently asked questions.

This time, we are also offering all interested parties the opportunity to consult with our [Data Steward Service Center \(DSSC\) team/ FAIRagro Helpdesk](#) regarding their Use Case application. The DSSC team is happy to assist applicants in:

- Identifying potential points of connection to FAIRagro's Task Areas (TAs) and Measures,
- Ensuring meaningful extensions to existing Use Case work,
- Highlighting possible gaps and valuable contributions that future Use Case Projects and Pilots could address.

We strongly encourage all applicants to take advantage of this support and contact the DSSC team (dataservice@fairagro.net) as early as possible to develop their ideas into promising and impactful proposals.

Furthermore, interested parties are advised to signal their interest at the earliest possible stage. If applicable, they should initiate the necessary formalities to attain FAIRagro Participant status in a timely manner.

Evaluation procedure

The selection will be made in accordance with the FAIRagro governance, involving necessary bodies such as the Steering Committee (SC) and the Community Advisory Board (CAB) and is subject to the availability of financial resources and the presence of essential FAIRagro resources for successful implementation. UC Pilots and UC Projects will be evaluated separately, but a decision will be made based on a holistic assessment taking into account the availability of FAIRagro funds and resources.

Onboarding procedure

In case of approval of the UC application, the onboarding process for new UCs begins with administrative procedures, including the preparation of funding agreements and if necessary, the formalities associated with becoming a FAIRagro Participant. Subsequently, the technical onboarding process involves integration into FAIRagro structures, completion of essential documents describing the Use Case, and mapping relevant information on the FAIRagro website.

In the event of the approval of the UC application, the Use Case commitments and obligations include:

- Ensuring compliance with the work plan and schedule involves formulating specific milestones and their quarterly scheduling
- Annual & final report, plus UC specific deliverables, including publication of user stories/ community guidelines and recommendations
- Filling necessary onboarding documents (UC inventory, UC requirements, ect.)
- Contribution of content on the UC status quo and advances for the FAIRagro website and other media
- Attendance at FAIRagro events, in particular monthly TA1 JF, annual FAIRagro Project Plenaries, bi-annual Community Summits
- Participation at and contribution to further relevant FAIRagro and external events (trainings, conferences, hackathons, ect.)
- Implementation of dissemination and outreach activities

Appendix 1: Summary of application requirements and evaluation criteria

Alignment with FAIRagro Objectives & Quality (Weight: 60 %)

Relevance of Research Question and RDM Challenge:

- A well-defined and relevant research question addressing key challenges in agricultural research or related disciplines.
- A specific and clearly articulated Research Data Management (RDM) challenge that the project aims to address.
- Added expertise and valuable preliminary work of the involved institutions.

Development and Implementation of Practical Solutions:

- Concrete, actionable approaches to addressing RDM challenges using FAIRagro concepts, infrastructures, and services.
- Demonstrable and substantial contributions to the objectives of FAIRagro's Task Areas (TA), with clear connections to existing services and measures.
- Outcomes as meaningful, non-isolated, and scalable solutions: Prioritizing interoperability to ensure relevance, broad applicability, and adoption across agricultural sciences and the wider community.

Demonstration of FAIR Practices:

- Consideration of the current FAIRness status (e.g., technology readiness level) and concrete plans for improvement or further development.
- Active and measurable contributions to the implementation of FAIR principles (Findable, Accessible, Interoperable, Reusable).
- Proven expertise and relevant contributions from all participating institutions, co-applicants, and associated partners.

Work Plan and Sustainability:

- A detailed and coherent work plan with clearly defined actions, milestones, and deliverables.
- A realistic and well-structured timeline, including an intended start date and defined project duration.
- Evidence of long-term impact on the research community and broader stakeholders.
- Sustainable integration of FAIR RDM practices and development of scalable solutions that can be adopted beyond the project's scope.
- An effective risk mitigation strategy.

Strategic Fit & added value (Weight: 40%)

Synergies and Interdisciplinary Collaboration:

- Integration of different disciplines within agroecosystem science and/ or broadening the scope towards agricultural science (e.g. including animal-related sciences) and/ or extension to neighbouring disciplines/ domains (e.g. forestry).
- Inclusion of multiple including new institutions as main, co-applicants and associated partner to foster collaborative RDM and broaden our community
- Demonstrated synergies or collaborations with other NFDI consortia and/ or further related (agricultural) research and/ or RDM initiatives, networks or projects.

Contribution to Cultural Change

- Dissemination strategy to effectively communicate results and best practices.
- Planned outreach activities for engaging with the community, such as workshops, training sessions, and public presentations or participation in discipline-specific conferences.
- Clear measures and activities for documenting, communicating and promoting project outcomes, including publications, guidelines, and recommendations.
- Significant contribution to establishing FAIR data management as a standard in agricultural research.

The selection of UC Pilots and UC Projects is subject to the availability of financial resources and the availability of essential FAIRagro resources for the successful implementation.