

Glossary

TERM	DEFINITION (max 100 words)	FARMBOOK SPECIFIC
Actor	An actor is a partner taking part in project activities, contributing to project outcomes. An actor is different from a stakeholder.	
AGROVOC	AGROVOC is a multilingual controlled vocabulary covering all areas of interest of the Food and Agriculture Organization of the United Nations, including food, nutrition, agriculture, fisheries, forestry and the environment.	
Artificial Intelligence (AI)	- The theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.	
Agricultural Knowledge and Innovation Systems (AKIS)	AKIS is the organisation and interaction of actors, organisations and institutions who use and produce knowledge and innovation for agriculture and interrelated fields. The main players of the AKIS are: farmers, advisors, researchers, (farmer) organisations, retailers, media, services, ministries: they all produce and need knowledge. The aim is to create a regional/national innovation ecosystem by enhancing knowledge flows between the AKIS players as well as strengthening links between research and practice. (VAN OOST 2018 Setting the scene and outlook on EIP and AKIS in the post-2020 CAP. EIP-AGRI Seminar: From Operational Group project to impact, Spoleto, Italy.) Video about AKIS: https://youtu.be/O5u-xTkJG3g	
Ambassador (AMB)	A project partner (or AKIS actor) that promotes the use of the EU-FarmBook and facilitates	Specific
Annotation	Provide knowledge objects with metadata	
Application Programming Interface (API)	- A software intermediary that allows two applications to talk to each other. In the context of the EU-FarmBook, this is the communication layer of the platform responsible for	Specific

	connecting the Storage, Services and User Interfaces and handling the secure transfer of data and objects.	
API endpoint	An API endpoint is a point at which an API -- the code that allows two software programs to communicate with each other -- connects with the software program. APIs work by sending requests for information from a web application or web server and receiving a response.	
Beneficiary	An individual, group or organization that benefits directly or indirectly from an action or intervention, public or private, that involves some form of support, service, facility or information.	
C4	Software visualization architecture model (Context, Container, Component, Code) (c4model.com)	
Common Agricultural Policy (CAP)	CAP is the European Union agricultural policy, established under Article 33 of the Treaty establishing the European Community .	
Cross Cutting Objective (CCO)	in the CAP plan – this needs a description	
Communication, Dissemination & Exploitation (C,D&E)	<p>Communication: is a strategically planned process that starts at the outset of the project and continues throughout its entire lifetime, aimed at promoting the project and its results. The objective is to reach out to society and show the impact and benefits of the project.</p> <p>Dissemination is the public disclosure of the results by any appropriate means (other than resulting from protecting and/or exploiting the results), including by scientific publications, in any medium. The objective is to transfer knowledge & results.</p> <p>Exploitation refers to the use of the results for commercial purposes or in public policy making.</p> <p>The most common misunderstandings are between communication and dissemination.</p>	
Co-creation	Co-creation describes the collaboration between actors to make the best use of complementary types of knowledge (scientific, practical, organisational, etc.) in view of the joint development and diffusion of innovative solutions or opportunities, which are ready to implement in practice. Synonyms are 'collaboration for innovation' or 'co-innovation' and 'interactive innovation', which emerged from the	

	context of the European Innovation Partnership ‘Agricultural Productivity and Sustainability (EIP-AGRI) and the so-called ‘multi-actor approach’.	
Co-design	An on-going process of co-creating or co-adapting tools with users (or users representing individuals or organisations in a multi-actor setting). Co-design is based on a distinct set of principles and practices for understanding problems and generating solutions. It signifies the active involvement of a diverse range of participants (or actors in multi-actor projects) in exploring, developing, and testing responses to shared challenges.	
Collaborative group (CG)	Collaborative groups (CGs) consist of targeted users from the EUFarmBook user community (E&T CGs), carrying out a needs assessment, developing E&T plans (T4.2 and T4.4), and contribute to various co-design processes required through the duration of the project.	
Community managers	Community Managers include those responsible for administering key materials and content on the EU-FarmBook. This includes help pages, images and any user-driven content that needs to be monitored, such as comments and message boards.	Specific
Conceptual framework		
Consortium	Commonly used in the specific context of EU funding to describe a group of organizations that form a partnership to apply for (and potentially implement) a project or program Group of (public and/or private) actors (beneficiaries) that receive funding to implement a work plan of a project	
Consumers	Consumers are the end users who will access the EU-FarmBook interfaces to search for and retrieve the KOs available, primarily through the website, mobile app, data tools and APIs. Examples of consumers include farmers, foresters, advisors, researchers and policy-makers.	Specific
Contributor	Contributors create, provide, upload, and maintain KOs and their associated metadata. For example, the teams and individuals involved in Horizon 2020, Horizon Europe and EIP Operational Group (OG) projects responsible for creating and uploading KOs to the EU-FarmBook, are considered contributors.	Specific

Coordination and support action (CSA)	Coordination and support action (CSA) that improve cooperation among EU and associated countries to strengthen the European Research Area including, for example, standardisation, dissemination, awareness-raising, communication and networking activities, policy dialogues, mutual learning or studies. The EU funding covers up to 100% of the project costs.	
Community Research and Development Information Service (CORDIS)	www.cordis.eu is a platform maintained by the Commission Services which presents data and metadata of all EU funded projects such the list of partners, their budget, a summary and the Deliverables after review and acceptance by a team of monitors.	
Create, Read, Update, Delete (CRUD)	CRUD is an acronym that comes from the world of computer programming and refers to the four functions that are considered necessary to implement a persistent storage application: create, read, update and delete	
Deep Learning (DL)	Deep Learning - a subset of machine learning where a neural network attempt to simulate the behavior of the human brain allowing it to “learn” from large amounts of data.	
Digital Object Identifier (DOI)	– a persistent interoperable identifiers (needs more explanation why this is an important term!)	
EIP-AGRI	<p>EUROPEAN INNOVATION PARTNERSHIP FOR AGRICULTURAL PRODUCTIVITY AND SUSTAINABILITY (EIP-AGRI)</p> <p>The EIP-AGRI is the European policy instrument for interactive innovation for agricultural and rural development. The purpose of the European innovation partnership is to promote a) the productivity and efficiency of the agricultural sector and b) the sustainability of agriculture (securing soil functionality at a satisfactory level by 2020). The EIP-AGRI is about creating synergies between existing policies, most notably the EU’s 2014-2020 rural development policy and its research and innovation policy which is known as Horizon 2020. The EIP-AGRI focuses on forming partnerships, using bottom-up approaches and linking actors in different types of interactive innovation projects such as the Operational Groups under national / regional Rural Development Programmes (RDPs) and multi-actor projects under Horizon 2020. EIP-AGRI Focus</p>	

	Groups are a multi-actor networking activity organised at the EU level.	
End-user (or user)	These are individuals who ultimately use or are intended to use a product or service	
European Network for Rural Development (ENRD)	The European Network for Rural Development was established in 2008 by the European Commission to help member states implement their network in an efficient manner. The network provides a forum for connecting rural Europe. It also serves as a platform for sharing ideas and experiences as to how Rural Development programmes work in practice and how they can be improved. Its main stakeholders include national rural networks , member state authorities, Local Action Groups and other Rural Development organisations having an EU perspective. The network shares information with stakeholders in a variety of ways, including through its publications and its participation in events and fairs across Europe.	
Epics	An agile epic is a body of work that can be broken down into specific tasks (called user stories) based on the needs/requests of customers or end-users. Epics are an important practice for agile and DevOps teams.	
Education & Training (E&T) material	E&T material is based on high-quality practice material and was developed for education and training purposes. It can be a single KO as well as a seminar, webinar, module or course consisting of several KO or even a MOOC (Massive Open Online Course)	
E&T platforms	Various platforms for education, training and online learning exist. Platform hosts distinguish between: a) online learning platforms (or Online Learning Marketplaces) include Coursera, Skillshare, Udemy, Codecademy, Edx, Pluralsight, Future Learn, and Moodle; and b) online course platforms (or Learning Management Systems) like LearnWorlds, Teachable, Thinkific, Kajabi, and Podia. An LMS is the higher category usually used by enterprises for employee training, customer education, and onboarding or by academic institutions to support teaching. Unlike online learning platforms, online course platforms are cloud-hosted software that allows instructors to	

	create online classes or individual lessons by uploading educational material that they have created using text, images, video, PDF files, and audio.	
Extract, Transform, Load (ETL)	Extract, transform, and load is the process of combining data from multiple sources into a large, central repository called a data warehouse. ETL uses a set of business rules to clean and organize raw data and prepare it for storage, data analytics, and machine learning (ML).	
European Union (EU)		
EU-FB	EU-FarmBook	
EURAKNOS, EUREKA	Predecessor projects for the EU-FarmBook project	
Evaluation	Evaluation is an evidence-based judgement of the extent to which an existing intervention is useful, effective, efficient, relevant to the current needs, coherent and whether it has achieved added value. Evaluation can have a variety of objectives, including to measure outcomes; to understand causal pathways generating changes; and to stimulate learning processes. There are several types of evaluation such as ex-ante evaluation (performed before the implementation of an intervention), mid-term evaluation (performed towards the middle of the implementation period), interim evaluation and ex-post evaluation (performed directly after the completion of an intervention). Impact evaluation is typically performed after an intervention has happened to assess its long-term outcomes, sustainability and unforeseen effects.	
Facilitation toolbox	Ambassadors will participate in the co-development of an EU-FarmBook Ambassadors 'facilitation toolbox' which will include templates and guidelines for the periodic AKIS review (T3.3); a partnership agreement (EU-FarmBook Alliance) (T3.3); guidelines for uploading knowledge objects (T3.4), and relevant methodologies for establishing the necessary feedback loops (T3.5).	Specific
Findability, Accessibility, Interoperability, and Reusability (FAIR)	A set of guiding principles proposed by a consortium of scientists and organizations to support the reusability of digital assets. (https://www.nature.com/articles/sdata201618)	

Frequently Asked Questions (FAQ)	A list of questions and answers relating to a particular subject, especially one giving basic information for users of a website.	
Features	Features describe a chunk of functionality that fulfils user needs while adding value to the overall product. They are a collection of user stories and tasks, providing the link between what the EU-FarmBook will do, how it will do it, and why.	
FoodOn	A broadly scoped ontology representing entities which bear a "food role" (needs more explanation)	
General Data Protection Regulation (GDPR)	GDPR stands for General Data Protection Legislation. It is a European Union (EU) law that came into effect on 25th May 2018. GDPR governs the way in which we can use, process, and store personal data (information about an identifiable, living person).	
Graphical User Interface (GUI)	A GUI is a form of user interface that allows users to interact with electronic devices through graphical icons and audio indicator such as primary notation, instead of text-based UIs, typed command labels or text navigation.	
Impact	Wider long-term effect on society, economy and science, enabled by the outcomes of a project in the long term. It refers to the specific contribution of the project to the expected impacts described in the work program. Impact generally can be observed sometime after the end of the project.	
Impact assessment	Impact assessment is part of the evaluation practices explained above. It is a form of outcome evaluation that assesses the net effect of a programme. The methodological approach is usually based on comparing outcomes and an estimate of what would have happened without the support programme. Impact assessment differs from impact evaluation, which takes place several years after an intervention has happened. It assesses the long-term outcome and the intervention's sustainability and unforeseen effects. Since impact assessment addresses outcomes, it can or should be done at any time of the process, including as a monitoring activity. In this document, it is always included when the general term 'Evaluation' is used.	
Innovation Actions (IA)	Innovation action (IA) that produces plans or designs for new or improved products, processes or services including prototyping, testing, demonstrating,	

	<p>piloting, large-scale product validation and market replication. The EU funding covers up to 70% of the project costs.</p>	
Innovation broker	<p>This term, in the new CAP, has been replaced by Innovation Support Services</p>	
Innovation Support Services (ISS)	<p>Services the EU Member States must provide, as required by CAP Regulation, to support for innovation, for the preparation and implementation of the EIP-Agri operational groups (OGs). Aiming for a general improvement of connections between actors, policies and programmes/projects, knowledge(s) and experience(s), methods, and instruments to speed up the creation of innovative solutions. ISS include a range of activities encompassing the facilitation of networking, access to financial resources, support for actors to articulate clear demands, institutional support for niche innovations and scaling, capacity building of innovation actors, awareness-raising through the dissemination and exchange of knowledge, and the provision of general and backstop advice</p>	
Interoperability	<p>The ability of different systems and applications across multiple organizations and entities to connect, communicate and share data and information in a coordinated way, without effort from the end user</p>	
JavaScript Object Notation (JSON)	<p>JSON (JavaScript Object Notation) is a lightweight data-interchange format. It is easy for humans to read and write. It is easy for machines to parse and generate. It is based on a subset of the JavaScript Programming Language Standard ECMA-262 3rd Edition - December 1999. JSON is a text format that is completely language independent but uses conventions that are familiar to programmers of the C-family of languages, including C, C++, C#, Java, JavaScript, Perl, Python, and many others. These properties make JSON an ideal data-interchange language.</p>	
JSON Linked Data (JSON-LD)	<p>JSON-LD is a lightweight Linked Data format. It is easy for humans to read and write. It is based on the already successful JSON format and provides a way to help JSON data interoperate at Web-scale. JSON-LD is an ideal data format for programming environments, REST Web services, and unstructured databases such as Apache CouchDB and MongoDB.</p>	

High-quality KO	See practice-ready material	
Knowledge Graph (KG)	Knowledge Graph - Also known as a semantic network, represents a network of real-world entities—i.e. objects, events, situations, or concepts—and illustrates the relationship between them	
Knowledge Object (KO)	Knowledge Object – In EU-FarmBook terminology, a collective term for practice-oriented materials e.g. videos, podcasts, images and text documents.	Specific
Knowledge reservoir for practice	An open access (FAIR) digital EU wide knowledge reservoir for practice-oriented agriculture and forestry innovative knowledge	Specific
Key performance indicator (KPI)	A quantifiable measure of performance over time for a specific objective. KPIs provide targets for teams to shoot for, milestones to gauge progress, and insights that help people across the organization make better decisions.	
Monitoring	Monitoring refers to on-going evaluation activities carried out by project managers who use a systematic collection of data on specified indicators. The aim is to provide the coordinators, project members and the main stakeholders of an on-going development intervention with indications that show the extent of progress and achievement of objectives and progress in the use of allocated funds. Continual data collection and self-reflection are intended to assist decision making throughout the co-creation process to improve them and achieve better impacts.	
Multi-Actor Project (MAP)	Multi-actor projects are a key part of the EIP-AGRI. They are international projects funded by the EU Horizon Europe research and innovation programme, but do not just involve researchers. They also involve the practical users and ‘multipliers’ of the research results. This can include farmers and foresters (and/or their representative organisations), advisers, service providers, NGOs, agri-food businesses, start-ups and all other forms of rural enterprise. These non-academic partners co-operate closely with the research partners throughout the entire period of the project to: clearly identify real problems and opportunities faced by practitioners; contribute knowledge and experience to the co-creation of solutions, and; play an active role in the dissemination and exploitation of these solutions. The multi-actor approach creates “co-ownership” of	

	research results which greatly helps to speed-up their acceptance and uptake	
Multi-Actor Approach (MAA)	The “multi-actor approach” aims to make innovation fully demand-driven, involving all the relevant actors, with complementary expertise, along the whole process cycle, from the participation in the planning of work and experiments, their execution, up until the dissemination of results and a possible demonstration phase. The relevant actors are those that share a complex problem, which requires new knowledge and practice and include actors from different societal sectors such as researchers, entrepreneurs, educators, government workers, NGO representatives as well as farmers/farmer groups, advisors, enterprises, etc. Through MAA, actors can negotiate about goals, decision making, and activities, co-creating results and enabling their ownership.	
Metadata	A set of data that describes and gives information about other data (i.e., a Knowledge Object)	
Microservices	An architectural and organizational approach to software development where software is composed of small independent services that communicate over well-defined APIs.	
European Member States (MS)		
Natural Language Processing (NLP)	NLP refers to the branch of artificial intelligence concerned with giving computers the ability to understand text and spoken words in much the same way human beings can	
National Contact Points (NCPs)	The network of National Contact Points (NCPs) is the main structure to provide guidance, practical information and assistance on all aspects of participation in Horizon Europe. NCPs are also established in many non-EU and non-associated countries ("third countries").	
National Rural Network (NRN)	National Rural Networks (NRNs) operate in each EU Member State to support and enhance rural development objectives as defined in the Rural Development Programmes (RDPs). NRNs enable and facilitate exchange and learning between all the partners involved in Rural Development policy implementation: public authorities, economic and social partners, and the relevant bodies representing civil society.	

CAP support units		
Online Platform	Synonyms: repository, knowledge reservoir, digital reservoir.	
Ontology	<p>A set of concepts and categories in a subject area or domain that shows their properties and the relations between them.</p> <p>In the context of the EU-Farmbook, ontologies are a common set of semantic terms and definitions within the agricultural domain (e.g., AGROVOC, AGRO, ENVO, FoodOn).</p>	Specific
Operational Group (OG)	<p>Operational groups are multi-actor projects funded under the rural development policy since 2014, within the framework of the EIP-Agri. They have been established by Regulation (EU) 1305/2013 (art. 35) and reconfirmed by Regulation (EU) 2021/2115 (art. 127 (3)).</p> <p>Operational groups engage a multiplicity of actors (farmers, researchers, advisors, businesses, environmental groups, consumer interest's groups or other NGOs) in developing innovations in response to practical problems or opportunities for competitiveness and sustainability of farmers (EC, "Communication", 2010). They promote an interactive approach to innovation aimed at developing new practices for farms and forestry, through the implementation of research results, the development of new ideas, and the testing and tailoring of existing techniques/practices to new geographical/environmental contexts. Operational groups are action groups, meaning that all the project partners must be actively involved in the definition and implementation of the project idea (co-decision), through a bottom-up approach, as well as in the co-creation of knowledge, triggering a collaborative process between the actors from different fields and bridging the existing gaps between research and practice. They are also project-driven, since they are set up around an innovative project and result-oriented, since their task is to draw up an investment plan oriented towards the achievement of farm (and EIP-Agri) specific results (European Commission, 2014).</p>	
Outcome	Changes or benefits resulting from activities and outputs. Short-term outcomes produce changes in	

	learning, knowledge, attitude, skills or understanding. Intermediate outcomes generate changes in behaviour, practice or decisions. Long-term outcomes produce changes in condition.	
Output	The products and services that result from the completion of activities within an intervention.	
Pathways to Impact	In Horizon Europe, pathways to impact originate from (1) specific needs and lead via (2) action & results, (3) C, D & E, (4) target groups, (5) outcomes to (6) impacts	
Pathway for embedding the use of the EU-Fambook		
Persona	A persona is a fictional, yet realistic, description of a typical end user of the product or service. A persona is an archetype instead of an actual living human, but personas should be described as if they were real people whose goals and characteristics represent the needs of a larger group of users. This generally includes behavior patterns, goals, skills, attitudes, and background information, as well as the environment in which a persona operates.	
Project Coordination and Management Team (PCMT)	(= UGent + Esset partners in the EU-FarmBook project)	
Product Backlog Items (PBI)	A single element of work that exists in the product backlog. PBIs can include user stories, epics, specifications, bugs, or change requirements.	
Practice-Oriented Material	Practice-Oriented material are knowledge objects which result from any kind of a research and/or innovation project must be processed to become high-quality material suitable and attractive for the use by practice (farmers, foresters, advisors, consultants, other supporters). The processing includes several steps such as ‘selection of relevant aspects’, ‘translation’ of text into a non-academic/non-policy language, ‘plain English’ phrasing in a concise and attractive way that is easy to read/understand. ‘Diligent editing’ and ‘professional design’ are also crucial. Guidance and training, as well as the support by journalists help.	
Publisher/Subscriber	Publish/subscribe messaging, or pub/sub messaging, is a form of asynchronous service-to-service communication used in serverless and microservices architectures.	

Query		
Resource Description Framework (RDF)	– A model for encoding semantic relationships between items of data so that these relationships can be interpreted computationally.	
Rural Development Programmes (RDPs)	EU countries implement national and regional rural development programmes (RDPs), which are co-financed by the European fund for rural development (EAFRD) and national budgets.	
Research and Innovation Action (RIA)	Research and Innovation Actions are one of three types of projects funded by the EU Framework Programme Horizon Europe. RIA have a higher proportion of research than IA (Innovation Actions) or CSA (Coordination and Support Action), which aim to test and disseminate existing innovative solutions. The Commission funds RIA with and without multi-actor requirement. EUF is a RIA that needs to comply with the multi-actor requirement.	
Result	What is generated during the project implementation, this can be tangible or intangible results of the project. Project results can be reusable or exploitable directly (e.g. data, educational materials), or can have potential to contribute to further research or innovation (e.g. platforms)	
Scenario (to embed the use of the EU-Farmbook)	A postulated sequence or development of events for how the EU-FarmBook could be embedded.	Specific
Self organisation	Self-organisation is an approach to management that aims to distribute decision making and work responsibilities across the team. While humans are exceptionally good with organisation, a lot of it is either implicit or it is highly hierarchical. Self-organisation is different in that it aims to decentralise the capacity to act while empowering individuals by explicitly defining what they can do.	Specific
Services	Open-source and custom software built to enhance the EU-FarmBook's content and support specific processes and end-user features.	
SPARQL	SPARQL Protocol and RDF Query Language - SPARQL can be used to express queries across diverse data sources	
Single Sign-On (SSO)	A session and user authentication service that permits a user to use one set of login credentials	

Stakeholder	A stakeholder is an individual, group of persons or organization That have an interest in the project and its output, or provide feedback to the project from the outside.	
Storage	The physical hosting of KOs and their metadata, data models and other data, information or objects required and created by the platform.	
Target group	The target groups of EU-FarmBook are (1) Farmers and Foresters, (2) Advisors and Intermediates, (3) Students, Educators, Trainers, and Researchers, (4) Policy-Makers and National Contact Points, (5) Journalists and Media, (6) Data Content Managers, (7) AKIS Coordination Bodies, (8) CAP Networks, (9) Coordinators and Partners of H2020 or Horizon Europe Projects, (10) Coordinators and Partners of Operational Groups	
Ticket		
Thematic Network (TN)	Thematic Networks are multi-actor projects (funded by the EU Framework Program Horizon 2020 or Horizon Europe, usually Coordination and Support Action), which specifically collect existing knowledge and best practices on a given theme to make it available in easily understandable formats for end users such as farmers, foresters, advisers, and others.	
User Interface (UI)	User Interface - how the user and a computer system interact, the use of input devices and software. The primary channels for end-users to interact with the EU-FarmBook, including websites and mobile applications.	

User Activities and Stories	User Activities are the high-level activities contributors, consumers, stakeholders, and community managers perform. For example, "A contributor uploads a knowledge object to the EU-FarmBook". User Stories describe the low-level actions and result contributors, consumers, stakeholders, and community managers will take and want to achieve. For example: "A contributor from a Horizon 2020 project navigates to an EU-FarmBook web page where they log in and begin the process of uploading their knowledge object and a required set of metadata."	Specific
User Groups	In personal or business computing, a user group is a set of people who have similar interests, goals or concerns. The members have regular meetings where they can share their ideas. Ideally, the members of a user group live in the same geographic area, so they can get together in person.	
User Experience (UX)	<p>User Experience - The overall experience of a person using a product such as a website or computer application, especially in terms of how easy or pleasing it is to use.</p> <p>UX focuses on having a deep understanding of users, what they need, what they value, their abilities, and their limitations. It also considers the business goals and objectives of the group managing the project. UX best practices promote improving the quality of the user's interaction with and perceptions of your product and any related services.</p>	
Work Package (WP)	Work Package - a sub-project, which, when combined with other work package units, form the completed project.	