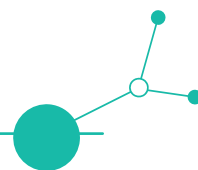# D.1.2.1 Statut ekosystemu transferu wiedzy w zakresie rolnictwa precyzyjnego

Uwaga – tłumaczenie pomocnicze,
obowiązuje wersja angielska Statutu

SUMMARY

1. POSTANOWIENIA OGÓLNE

1.1. Niniejszy dokument stanowi wstępną umowę mającą na celu realizację celów i zadań określonych poniżej.

1.2. Umowa ta, choć niewiążąca, określa ogólne intencje ubezpieczycieli w odniesieniu do wskazanych celów i zadań.

1.3. Niniejsza umowa jest realizowana w ramach projektu CE0200761 Interreg Agri-Digital Growth, finansowanego w ramach Programu Interreg EUROPA ŚRODKOWA na lata 2021-2027, którego celem jest uruchomienie ekosystemu transferu wiedzy w zakresie rolnictwa precyzyjnego.

2. CELE i ZADANIA

2.1. Celem niniejszej Umowy jest stworzenie sieci transferu wiedzy z zakresu rolnictwa precyzyjnego w Europie Środkowej. W ramach projektu Agri-Digital Growth partnerzy projektu dążą do identyfikacji i mapowania interesariuszy w regionach programu Interreg EUROPA ŚRODKOWA, którzy aktywnie angażują się w rozwój cyfryzacji, promowanie zrównoważonych praktyk, produkcję maszyn w sektorze pierwotnym i powiązany z nim łańcuch wartości. Inicjatywa ta ma na celu wspieranie współpracy między firmami (producentami maszyn i systemów rolniczych, rolnikami, konsultantami itp.), instytucjami badawczymi, izbami rolniczymi i organizacjami wsparcia biznesu. Zidentyfikowani interesariusze zostaną włączeni do platformy www.agridigitalgrowth.eu (www.precisionfarm.it), która będzie stanowić centralny punkt odniesienia dla firm poszukujących centrów wiedzy w celu nawiązywania partnerstw i promowania synergii w dziedzinie rolnictwa precyzyjnego. Platforma będzie służyć jako obszerne i dynamiczne repozytorium, zawierające „Mapę Centrów Wiedzy", która będzie bazować na „Mapie Dostawców i Producentów Technologii Rolnictwa Precyzyjnego" opracowanej w ramach projektu Interreg Central Europe Transfarm 4.0 i ją rozszerzać. Platforma, utworzona i zarządzana przez ARR SA, będzie działać przez co najmniej trzy lata po zakończeniu projektu (listopad 2026 r.). Będzie ona systematycznie aktualizowana, aby wspierać promocję inicjatyw, upowszechnianie wiedzy, dzielenie się doświadczeniami i wymianę zasobów między partnerami. Platforma zostanie zaprojektowana w celu ułatwienia współpracy między producentami maszyn i systemów rolniczych, ośrodkami badawczymi i organizacjami rolnictwa precyzyjnego, wspierając rozwój wiedzy w dziedzinie rolnictwa precyzyjnego.

2.2. Cele niniejszej Umowy obejmują między innymi następujące punkty. Dodatkowe cele mogą zostać uwzględnione w razie potrzeby:

- Wspieranie wdrażania cyfrowych i innowacyjnych technologii oraz transferu wiedzy specjalistycznej, w szczególności w celu wsparcia sektora rolnego na poziomie regionalnym, krajowym i międzynarodowym w regionach programu Interreg Europa Środkowa.

- Wspieranie i integracja istniejących i nowych lokalnych inicjatyw/organizacji zajmujących się rolnictwem precyzyjnym i cyfrowym.

- Promowanie zrównoważonych praktyk rolniczych w celu zmniejszenia wpływu na środowisko.

- Promowanie rozwoju umiejętności poprzez szkolenia i upowszechnianie wiedzy na temat zaawansowanych technologii.

- Ułatwianie wymiany wiedzy i doświadczeń między rolnikami, naukowcami, doradcami oraz producentami maszyn i systemów rolniczych.
- Wspieranie badań i rozwoju nowych rozwiązań technologicznych i praktyk rolniczych.
- Promowanie identyfikacji finansowania projektów z zakresu rolnictwa precyzyjnego i innych kwestii interesujących partnerów.

3. ZOBOWIĄZANIA STRON

3.1. Sygnatariusze niniejszej Umowy zobowiązują się do promowania kultury rozwoju, walidacji i wdrażania cyfrowych i innowacyjnych technologii w sektorze rolnym. Ich działania będą koncentrować się na identyfikowaniu i informowaniu interesariuszy zainteresowanych rozwijaniem współpracy, badań i możliwości biznesowych za pośrednictwem sieci, która zostanie utworzona z uwzględnieniem następujących cech.

4. STRUKTURA SIECI EKOSYSTEMU

4.1. Sieć lub inny podmiot prawny, który zostanie zidentyfikowany, jest otwarty dla wszystkich podmiotów zamierzających promować rozwój sektora pierwotnego, w szczególności ośrodków badawczych, uniwersytetów, producentów maszyn i systemów rolniczych, dostawców usług i doradztwa, organizacji wspierających przedsiębiorstwa, organów publicznych i organów regulacyjnych działających w sektorze rolnictwa i zrównoważonego rozwoju.

4.2. Każdy członek aktywnie uczestniczy w działaniach i przyczynia się do osiągnięcia wspólnych celów zgodnie z własnymi kompetencjami i zasobami.

4.3. Struktura i role hubów oraz członków:
4.3.1. Hub: Obejmuje partnerów założycielskich sieci Ekosystemu (partnerów projektu Wzrostu Cyfrowego Rolnictwa) oraz ośrodki badawcze, które następnie do niej dołączają i zgłaszają konkretne zapotrzebowanie. Huby pełnią funkcję centralnych ośrodków zarządzania działaniami, koordynacji projektów i definiowania wspólnych strategii. Wspólnie z firmami napędzają innowacje, rozwój umiejętności i promocję zrównoważonego rozwoju w ramach sieci Ekosystemu:

- CREA - Rada ds. badan i ekonomii rolnictwa – lider projektu, Włochy;
- Josephinum Research, Austria;
- Centrum Mechatroniki w Linz GmbH, Austria;
- EIT Digital IVZW, Belgia;
- Federunacoma SURL, Włochy;
- Fundacja Fenice onlus, Włochy;
- Plan 4 all, z.s., Czechy;
- Uniwersytet w Mariborze, Słowenia;
- Uniwersity Węgierski Węgry;
- Uniwersytet w Zagrzebiu, Chorwacja;
- Agencja Rozwoju Regionalnego S.A. w Bielsku-Białej, Polska.

4.3.2. Role Hubów: Huby koordynują działania sieci Ekosystemu i ułatwiają współpracę między partnerami, rozwijając i dzieląc się nową wiedzą, technologiami i metodologiami dla rolnictwa. Zajmują się:

- Przewodzeniem i współpracą w zakresie rozwoju i wdrażania nowych technologii w sektorze rolnym.
- Koordynacją i/lub udziałem w inicjatywach promujących zrównoważone praktyki rolnicze.
- Organizacją i/lub udziałem w programach szkoleniowych i warsztatach w celu podnoszenia umiejętności partnerów.
- Promowaniem, wspieraniem i/lub koordynacją projektów badawczych w ramach sieci Ekosystemu.
- Identyfikacją możliwości finansowania i koordynacją przygotowywania wniosków o pozyskanie funduszy.

4.3.3. Członek: Obejmuje wszystkie organizacje produkcyjne, takie jak producenci maszyn i systemów rolniczych, gospodarstwa rolne, dostawcy technologii, konsultanci, startupy i inne podmioty operacyjne. Członkowie opracowują, wdrażają i adaptują technologie i praktyki promowane przez sieć Ekosystemu, wnoszą praktyczne informacje zwrotne, uczestniczą w testach pilotażowych i upowszechniają dobre praktyki wypracowane wspólnie z hubami.

4.3.4. Role członków: Członkowie współpracują z centrami i mogą proponować oraz uczestniczyć w różnych inicjatywach sieci Ekosystemu, przyczyniając się do:

- Badań i rozwoju nowych rozwiązań i projektów pilotażowych.
- Opracowywania programów szkoleniowych w celu podnoszenia kwalifikacji pracowników i studentów.
- Uczestnictwa w składaniu wniosków projektowych i pozyskiwaniu finansowania.
- Dzielenia się doświadczeniami, danymi i najlepszymi praktykami z centrami i innymi partnerami sieci Ekosystemu.

5. KONKRETNE DZIAŁANIA REKOMENDOWANE DLA INTERESARIUSZY

5.1. Ekosystem Wiedzy o Rolnictwie Precyzyjnym ma na celu zapewnienie partnerom sieci następujących korzyści:

- Zapewnienie interesariuszom należącym do sieci ukierunkowanych szkoleń w obszarach, które ich interesują. Na platformie www.agridigitalgrowth.eu (www.precisionfarm.it) zostanie udostępniona strefa kursów online. Będą one obejmować szkolenia z zakresu rolnictwa precyzyjnego, cyfryzacji w rolnictwie i zrównoważonego rozwoju. Wszyscy partnerzy projektu, a w szczególności centra, będą dostarczać innowacyjnych informacji wspierających cyfryzację sektora.
- Promowanie wymiany wiedzy i jej transferu z teorii do praktyki, sprzyjanie współpracy między firmami, rolnikami i instytucjami badawczymi poprzez warsztaty, seminaria i demonstracje terenowe.
- Promowanie wymiany najlepszych praktyk i wzajemnego wsparcia. Ekosystem służy jako platforma do nawiązywania kontaktów między interesariuszami, aby promować ciągłą wymianę wiedzy i praktyczne wdrażanie technologii rolnictwa precyzyjnego. Celem jest przybliżenie wiedzy generowanej przez instytucje badawcze interesariuszom

(producentom rolnym, doradcom, rolnikom, studentom). Platforma będzie zawierać mapę organizacji zajmujących się rolnictwem precyzyjnym oraz dane kontaktowe, aby sprzyjać nawiązywaniu kontaktów między partnerami.

- ▪ Sieć Ekosystemu ma na celu wspieranie rolników i doradców w podnoszeniu kwalifikacji w zakresie wiedzy cyfrowej, poprawie ich zdolności do oceny wdrażania i wykorzystania potencjału rolnictwa precyzyjnego.
- ▪ Sieć Ekosystemu ma na celu wspieranie producentów rolnych i organizacji powiązanych z łańcuchem wartości rolnictwa w opracowywaniu nowych rozwiązań dla rolnictwa precyzyjnego i ich integracji z urządzeniem lub sprzętem.

Ponadto Ekosystem Wiedzy o Rolnictwie Precyzyjnym wspiera:

5.1.1. Międzynarodowe normy i wytyczne

- Sieć Ekosystemu promuje przyjmowanie wspólnych norm w celu zapewnienia jakości stosowanych praktyk i technologii.
- Wszystkie działania sieci Ekosystemu są zgodne z krajowymi i międzynarodowymi przepisami dotyczącymi bezpieczeństwa, regulacji rolnictwa i stosowania technologii.
- Sieć Ekosystemu stosuje podejście partycypacyjne, aktywnie angażując rolników i inne zainteresowane strony w transfer wiedzy.

5.1.2. Zrównoważony rozwój i innowacje

- Sieć Ekosystemu jest zaangażowana w opracowywanie strategii adaptacji do zmian klimatu oraz promowanie stosowania innowacyjnych technologii i praktyk w celu poprawy efektywności i zrównoważonego rozwoju działalności rolniczej.
- Sieć Ekosystemu monitoruje stan wiedzy w zakresie technologii i praktyk rolniczych, aby aktualizować swoje wytyczne i działania operacyjne.

5.1.3. Badania i finansowanie

- Sieć Ekosystemu wspiera partnerów w poszukiwaniu publicznych i prywatnych środków na finansowanie projektów z zakresu cyfryzacji, rolnictwa precyzyjnego i zrównoważonego rozwoju.
- Sieć Ekosystemu organizuje i uczestniczy w warsztatach, seminariach i konferencjach, aby promować badania i dzielić się odkryciami z opinią publiczną i partnerami.

5.2. Partnerstwo, rejestracja, odnowienie i opłaty

- Rejestracja: Udział w sieci Ekosystemu jest otwarty dla wszystkich podmiotów, które podzielają cele i zadania określone w niniejszej umowie. Rejestracja odbywa się za pośrednictwem platformy www.agridigitalgrowth.eu (www.precisionfarm.it).
- Odnowienie: Partnerstwo jest automatycznie odnawiane co roku, chyba że członek zrezygnuje.
- Wycofanie: Członek może zrezygnować z sieci Ekosystemu w dowolnym momencie, składając pisemne powiadomienie komitetowi koordynacyjnemu z co najmniej 30-dniowym wyprzedzeniem.
- Opłaty: Udział w sieci Ekosystemu jest bezpłatny i nie pociąga za sobą żadnych bezpośrednich zobowiązań finansowych dla partnerów.

5.3. Mechanizmy współpracy

- Huby współpracują ze sobą poprzez regularne spotkania (co najmniej raz na kwartał), zarówno wirtualne, jak i osobiste, w celu omawiania postępów, planowania nowych działań i dzielenia się wiedzą.
- Sieć Ekosystemu korzysta z internetowych platform współpracy, aby ułatwić komunikację i udostępnianie dokumentów, zasobów i pomysłów.
- Sieć Ekosystemu może organizować wizyty studyjne w hubach lub u członków sieci oraz w organizacjach spoza sieci.

5.4. Komunikacja, rozpowszechnianie i wykorzystanie danych
- Sieć Ekosystemu tworzy i utrzymuje platformę internetową służącą do wymiany wiedzy, doświadczenia i zasobów między partnerami (www.agridigitalgrowth.eu / www.precisionfarm.it).
- Sieć Ekosystemu organizuje szkolenia i wydarzenia upowszechniające, aby promować dobre praktyki i innowacje w sektorze rolnym.
- Partnerzy założyciele mają prawo do wykorzystywania danych kontaktowych partnerów w celu promowania inicjatyw sieci Ekosystemu i/lub samych partnerów. Dane te będą wykorzystywane wyłącznie do celów związanych z celami sieci Ekosystemu (punkt 2), takimi jak informowanie o wydarzeniach, możliwościach współpracy, aktualizacjach bieżących projektów i innych działaniach istotnych dla sektora rolnego.

6. POSTANOWIENIA KOŃCOWE

6.1. Klauzula ugodowa
- W przypadku sporów między partnerami, dotyczących interpretacji, wykonania lub stosowania postanowień, regulaminów lub wynikających z uchwał podjętych zgodnie z prawem przez właściwe organy Sieci, strony powołują się na orzeczenie Sądu w Padwie.

6.2. Postanowienia końcowe
- Postanowienia niniejszej umowy mogą zostać zmienione za zgodą kwalifikowanej większości partnerów założycielskich.
- Sieć może zostać rozwiązana za zgodą większości partnerów założycielskich lub gdy jej cele przestaną być osiągalne.

7. SKUTECZNOŚĆ

7.1. Niniejszy dokument stanowi oświadczenie w dobrej wierze o zamiarach Stron na dzień dzisiejszy i stanowi podstawę do zakończenia negocjacji opisanych w poprzednich Artykułach.

7.2. Niniejszy dokument ma zatem charakter programowy i niewiążący i nie należy go rozumieć jako propozycji, umowy przedwstępnej ani opcji, a zatem nie rodzi żadnych zobowiązań ani zobowiązań dla Stron.

8. KONSORCJUM PROJEKTOWE – HUBS – ZAŁOŻYCIELE EKOSYSTEMU TRANSFERU WIEDZY Z ZAKRESU ROLNICTWA PRECYZYJNEGO

Partner Wiodący P1 - CREA

P2 - Josephinum Research

P3 - Linz Center of Mechatronics GmbH

P4 - EIT Digital IVZW

P5 - Italian Agricultural Machinery Manufacturers Federation

P6 - Fenice Foundation NGO

P7 - Plan4all

P8 - University of Maribor

P9 - Hungarian University of Agriculture and Life Sciences

P10 - University of Zagreb, Faculty of Mechanical Engineering and Naval Architecture

P11 - Regional Development Agency in Bielsko-Biała.

9. ZAŁĄCZNIK - MAPOWANIE CENTRÓW WIEDZY W ROLNICTWIE PRECYZYJNYM – tylko w wersji angielskiej

9.1. ITALY

9.1.1. Polo tecnologico Alto Adriatico (https://www.polotecnologicoaltoadriatico.it/)

The Polo Tecnologico Alto Adriatico focuses on advancing precision farming through the integration of Industry 4.0 and advanced manufacturing technologies. Their activities include conducting feasibility analyses and technical assessments to support agricultural manufacturers in adopting digital solutions. By facilitating the implementation of automation, IoT, and smart manufacturing technologies, the organization helps optimize production processes, enhancing efficiency and innovation within the agricultural sector.

The Polo plays a vital role in bridging the gap between traditional manufacturing practices and cutting-edge digitalization. Their efforts ensure that businesses can leverage data-driven solutions to improve operational efficiency, increase competitiveness, and stay at the forefront of agribusiness innovation. This approach supports the digital transformation of agriculture, contributing to the growth and sustainability of precision farming practices.

9.1.2. University of Padua (www.unipd.it)

The Department of Land, Environment, Agriculture, and Forestry (TeSAF) at the University of Padova is a leading institution specializing in precision farming through the application of advanced technologies and remote sensing. The department focuses on integrating digital terrain analysis, hydro-geomorphology, and surface earth processes to enhance sustainable agricultural practices. Utilizing technologies such as drones, satellite imagery, and Structure-from-Motion photogrammetry, TeSAF conducts high-resolution analyses to monitor phenomena like soil erosion, landslides, and crop water stress. These insights are vital for developing adaptation and mitigation strategies, including the creation of micro-reservoirs for rainwater storage during drought periods.

TeSAF also explores the application of computer vision and 3D modeling in agriculture, particularly for terraced landscapes, enabling simulations of extreme weather events and identifying areas at risk of hydrogeological hazards. This approach supports farmers in implementing proactive measures to maintain landscape stability and resilience.

In addition to landscape monitoring, the department advances precision agriculture systems through the development and testing of innovative agricultural machinery and equipment. These technologies aim to improve fieldwork efficiency, reduce fuel consumption, and minimize the environmental impact of farming operations. TeSAF is also at the forefront of integrating sensors, drones, robotics, and artificial intelligence for crop monitoring and management.

In the field of viticulture, the department conducts research on remote sensing technologies to monitor vineyard variability, comparing data from satellite imagery and Unmanned Aerial Vehicles (UAVs) to optimize precision viticulture practices.

9.1.3. University of Modena and Regigo Emilia (https://www.unimore.it)

The University of Modena and Reggio Emilia (UNIMORE) hosts several cutting-edge laboratories dedicated to advancing research in artificial intelligence, computer vision, real-time systems, and signal processing. These labs contribute to a wide range of applications, from autonomous driving and industrial automation to healthcare and security.

AImagelab – Artificial Intelligence & Computer Vision Research Laboratory
Located within the Department of Engineering "Enzo Ferrari" (DIEF), AImagelab specializes in artificial intelligence, computer vision, and deep learning. The lab focuses on developing advanced algorithms for object detection, scene understanding, and image processing. Its research extends to domains such as video surveillance, autonomous navigation, and industrial automation, with applications that improve efficiency and safety across sectors like mobility, healthcare, and security. AImagelab is also actively involved in projects related to human behavior analysis and the development of AI systems for social good. Collaborations with the automotive and manufacturing industries further enhance the lab's role in driving innovation in autonomous systems and robotics.

HiPeRT Lab – High-Performance Real-Time Systems Laboratory
The HiPeRT Lab focuses on high-performance real-time systems, particularly in the context of multi-core and many-core devices. The lab plays a key role in the development of autonomous driving technologies and industrial automation systems, ensuring that real-time computing solutions meet the stringent demands of these industries. Research at HiPeRT covers a broad range of topics, from real-time scheduling and parallel computing to embedded systems and cyber-physical systems. The lab's work supports both academic research and industrial collaborations, contributing to advancements in areas like automotive technology and smart manufacturing.

SIGCOM Lab – Signal Processing and Communication Systems Laboratory
The SIGCOM Lab specializes in signal processing for digital communication systems, with a focus on applications such as indoor localization, vehicular navigation, and multiple-input multiple-output (MIMO) radar systems. The lab's expertise in MIMO radar is particularly valuable for autonomous driving, where precise environmental perception is critical. By processing 3D point cloud data, the lab develops methods to generate detailed azimuthal images, enhancing the ability of autonomous vehicles to detect and track objects in their surroundings. The lab's contributions extend to the development of advanced navigation and safety systems, supporting the next generation of smart transportation technologies.

9.1.4. University of Bologna (www.unibo.it)
The University of Bologna (UNIBO) hosts several advanced laboratories within the Department of Agricultural and Food Sciences (DISTAL), focusing on agricultural mechanics and the development of precision farming technologies. These labs are dedicated to

improving the design, performance, and sustainability of agricultural machinery, contributing to the broader goals of efficient and sustainable agriculture.

Agricultural Mechanics and Machinery Laboratory

This lab specializes in the design, construction, and evaluation of agricultural machinery, focusing on both technical performance and environmental sustainability. The lab employs a combination of experimental, numerical, and statistical methods to assess machinery functionality, including tractors and specialized equipment for precision farming. Research activities include the development of innovative testing methodologies and equipment to simulate real-world field conditions. For instance, the lab has designed systems like load carts to replicate field load conditions on test tracks, allowing for more accurate performance evaluations.

Precision Farming Technology Lab

Dedicated to advancing technologies that enhance farm efficiency and resource management, this lab focuses on the integration of digital tools and automation into agricultural practices. The lab explores systems such as idle-stop devices for agricultural tractors, evaluating their efficiency in reducing fuel consumption and emissions. By testing and validating smart machinery, the lab ensures that equipment meets the high standards required for modern sustainable agriculture. The lab also investigates sensor-based technologies, remote monitoring systems, and data-driven decision-making tools to support precision farming.

Machinery Testing and Validation Facility

This facility focuses on the performance assessment and safety validation of agricultural machinery. It supports the development of methodologies to evaluate the economic viability and environmental impact of new equipment. The lab emphasizes sustainability by assessing fuel efficiency, emissions, and overall machinery effectiveness under various field conditions. By simulating different operational scenarios, the facility plays a crucial role in ensuring that machinery aligns with the evolving demands of precision agriculture and meets international safety standards.

Together, these laboratories at the University of Bologna drive innovation in agricultural technology, supporting the transition to more efficient, safe, and sustainable farming practices. Their interdisciplinary research bridges the gap between engineering principles and agricultural applications, contributing to the advancement of precision farming both in Italy and globally.

9.1.5. National Research Council (www.cnr.it)

he National Research Council of Italy (CNR), through its Institute of Science and Technology for Sustainable Energy and Mobility (STEMS) in Ferrara, plays a critical role in advancing technologies for precision farming. The institute's research focuses on developing innovative solutions aimed at enhancing the efficiency, sustainability, and automation of agricultural machinery and processes.

STEMS specializes in areas such as embedded electronics, distributed control systems, and mobile robotics, all of which are applied to modern agricultural practices. The institute conducts extensive research on sensor technologies and functional safety systems, both essential components in the evolution of agricultural machinery. A significant aspect of their work involves integrating hybrid hydraulic-electric systems into farming equipment to optimize power distribution, improve energy efficiency, and reduce the environmental impact of agricultural operations.

One of the institute's key strengths lies in the development of advanced control systems that enhance the precision and automation of farming activities. These distributed control systems allow for more accurate management of resources like water, fertilizers, and energy, leading to more efficient field operations. Additionally, STEMS is deeply involved in the advancement of sensor technologies designed to monitor critical agricultural parameters, including soil moisture, crop health, and environmental conditions. This real-time data is vital for informed decision-making in precision farming, contributing to improved productivity and sustainability.

The institute also explores the use of mobile robotics in agriculture, with research focusing on autonomous tractors and robotic platforms for planting, harvesting, and crop monitoring. These technologies not only improve operational efficiency but also help reduce labor costs. Ensuring the functional safety of these autonomous and semi-autonomous systems is another crucial focus area, with STEMS developing protocols and safety measures that meet international standards, guaranteeing the reliable operation of advanced agricultural equipment.

Through its interdisciplinary research, the CNR's STEMS institute is making significant contributions to the field of precision agriculture, supporting the transition to sustainable and technologically advanced farming practices.

9.1.6. Bruno Kessler Foundation (https://www.fbk.eu/it/)

The Fondazione Bruno Kessler (FBK) is a leading Italian research institute dedicated to fostering technological innovation and digital transformation across various sectors, including agriculture. Through its Digital Industry Centre, FBK integrates artificial intelligence (AI), Internet of Things (IoT), robotics, and big data analytics to develop advanced solutions for precision farming, agrifood logistics, and sustainable agricultural practices. The institute plays a crucial role in bridging the gap between research and industry, providing testing infrastructures, AI-based decision support systems, and automation tools that enhance efficiency, sustainability, and competitiveness in the agrifood sector.

FBK is also the coordinator of Agri TEF (Agrifood Testing and Experimentation Facility), a flagship European project designed to support the testing and adoption of advanced digital technologies in the agricultural sector. As part of the EU's Testing and Experimentation Facilities initiative, Agri TEF aims to create specialized infrastructures for testing and validating AI and robotics solutions in real-world agricultural environments.

The primary goal of Agri TEF is to facilitate the development and deployment of trustworthy, safe, and efficient digital technologies within the agri-food sector. The project offers controlled environments where companies, especially SMEs, can experiment with and validate new technologies before market introduction. This includes AI-driven decision support systems, IoT devices for crop monitoring, and agricultural robotics for automating production processes.

Agri TEF focuses on several key areas:

Precision Farming: Developing and testing technologies like advanced sensors, drones, and AI platforms to optimize resource use and improve crop yields.

Agrifood Logistics: Implementing digital tools to enhance supply chain management, reduce waste, and increase distribution efficiency.

Sustainability and Resilience: Evaluating solutions that promote sustainable agricultural practices and resilience to climate change, including smart water and soil management systems.

Automation and Robotics: Testing automated machinery and agricultural robots for tasks such as planting and harvesting, with a focus on functional safety and system interoperability.

Through Agri TEF, FBK provides cutting-edge testing facilities and fosters collaboration between research institutes, industries, and policymakers, creating an open and dynamic innovation ecosystem. This approach accelerates technology transfer and ensures that the solutions developed are ready for large-scale application in the European agri-food sector, contributing to a more sustainable and competitive agricultural landscape.

9.1.7. REI Foundation – Tecnopolo Emilia Romagna (https://www.fondazionerei.it/)

The REI Foundation is a key player in advancing precision agriculture and agricultural automation, with a strong focus on ISOBUS standards and related technologies. As a recognized ISOBUS certification lab, REI provides industry-leading services in certification and precompliance testing, ensuring that agricultural machinery and systems meet international interoperability standards. Their Extended Virtual Terminal precompliance lab further supports manufacturers in verifying the compatibility and performance of their ISOBUS-enabled equipment.

REI coordinates the IDEAGRI network, a collaborative platform that brings together agricultural machinery manufacturers to drive innovation in ISOBUS, precision agriculture, and automation. This network fosters the exchange of knowledge and best practices, supporting the development of cutting-edge technologies and solutions tailored to the evolving needs of modern agriculture.

In addition to certification and network coordination, REI is actively involved in ISOBUS application development, creating custom software solutions that enhance the functionality and efficiency of agricultural machinery. The foundation also offers specialized training programs on ISOBUS technology, equipping professionals with the skills needed to implement and manage advanced agricultural systems.

REI Foundation is a partner in several EU-funded regional projects that expand its expertise into new areas of agricultural technology. As a partner in the EIC Ecosystem, REI contributes to the broader European innovation landscape, supporting the integration of advanced digital solutions in agriculture. The foundation is also involved in Riga-AT, a project focused on the development of autonomous agricultural machines, and Hy-ER, which explores the digital analysis of energy needs for hydrogen-powered vehicles.

9.2. Czech Republic

9.2.1. Lesprojekt-sluzby Ltd. (https://www.agrihub.cz)

Lesprojekt offers a wide range of services and solutions tailored to precision farming, with a strong emphasis on the advanced monitoring and optimization of agricultural processes. By integrating innovative technologies, Lesprojekt helps farmers and agribusinesses improve the efficiency, productivity, and sustainability of their operations.

Their solutions encompass data-driven approaches that leverage tools such as remote sensing, GIS (Geographic Information Systems), and IoT-based monitoring systems to provide real-time insights into crop health, soil conditions, and resource usage. This allows for more precise management of irrigation, fertilization, and pest control, leading to optimized yields and reduced environmental impact.

Lesprojekt also focuses on the automation of agricultural processes, offering technologies that streamline operations, reduce labor costs, and enhance decision-making. Their systems facilitate the integration of smart farming techniques, enabling farmers to adapt to changing environmental conditions and market demands while maintaining sustainable practices.

9.2.2. Agricultural Association of the Czech Republic (https://www.zscr.cz/En)

The Agricultural Association represents the interests of farmers in the Czech Republic, advocating for policies and initiatives that support the agricultural sector's growth and sustainability. The association plays a pivotal role in addressing a wide range of agricultural issues, with a particular focus on the development and implementation of sustainable farming practices.

In the realm of precision farming, the Agricultural Association promotes the adoption of advanced technologies that enhance efficiency, productivity, and environmental stewardship. This includes supporting the use of digital tools, data analytics, and automation to optimize resource management, improve crop yields, and reduce the environmental impact of farming activities.

The association works closely with farmers, policymakers, and industry stakeholders to facilitate the integration of innovative agricultural technologies, such as remote sensing, GPS-guided equipment, and IoT-based monitoring systems. By encouraging the use of these technologies, the association helps farmers adapt to evolving challenges, including climate change, resource scarcity, and market fluctuations.

In addition to technological advancements, the Agricultural Association is committed to education and training, providing resources and support to help farmers navigate the transition to sustainable and technology-driven agricultural practices. Through its efforts, the association contributes to the resilience and competitiveness of the Czech agricultural sector, ensuring that it remains a vital part of the national economy while promoting environmentally responsible farming methods.

9.2.3. Centre of Precision Agriculture, University of Life Sciences in Prague (https://cpz.czu.cz/cs)

The center at the Czech University of Life Sciences is dedicated to research and development in the field of precision agriculture technologies, playing a crucial role in advancing sustainable and efficient farming practices. By integrating cutting-edge digital tools, automation, and data-driven solutions, the center contributes to the modernization of agricultural processes, ensuring better resource management and improved productivity.

A key focus of the center is its involvement in research projects that explore the application of remote sensing, IoT-based monitoring systems, GPS-guided machinery, and AI-driven decision support tools. These technologies help optimize essential agricultural processes such as irrigation management, crop health monitoring, and soil analysis, reducing environmental impact while increasing efficiency.

Beyond research, the center serves as an educational hub, providing training programs, workshops, and academic resources to equip students, farmers, and industry professionals with the knowledge and skills necessary to implement precision agriculture solutions effectively. Through its strong collaboration with industry partners, government institutions, and agricultural organizations, the center facilitates the transfer of innovative research into real-world applications.

9.2.4. Wireless info project (https://www.wirelessinfo.cz/)

Wirelessinfo is a technology company specializing in wireless solutions and sensor systems for agriculture, with a strong focus on enabling precision farming. By leveraging wireless communication, IoT, and advanced data analytics, the company provides innovative tools that enhance data collection, monitoring, and decision-making in agricultural operations.

Wirelessinfo's solutions integrate sensor networks, remote sensing, and real-time data transmission to optimize key farming processes such as soil moisture monitoring, weather

data analysis, crop health assessment, and precision irrigation management. These technologies allow farmers to make data-driven decisions, improving efficiency, productivity, and sustainability while minimizing resource waste.

The company also focuses on the interoperability of agricultural technologies, ensuring seamless integration between sensor systems, farm management software, and automation tools. This approach facilitates the adoption of smart farming techniques, allowing agricultural businesses to leverage digital transformation for improved operational outcomes.

Through its expertise in wireless connectivity and sensor-based solutions, Wirelessinfo plays a key role in advancing digital agriculture, providing farmers with the technological infrastructure needed to enhance precision farming practices, optimize resource use, and increase overall agricultural sustainability.

9.2.5. Faculty of Agrisciences, Mendel University in Brno (https://af.mendelu.cz/en/)

The Faculty of AgriSciences at Mendel University in Brno is a leading institution in precision agriculture, conducting advanced research and developing technological solutions to optimize modern farming practices. With a strong emphasis on innovation and sustainability, the faculty integrates cutting-edge technologies such as remote sensing, GIS (Geographic Information Systems), IoT-based monitoring, and AI-driven decision support systems to enhance agricultural efficiency.

Through its research projects, the faculty explores new methods to improve crop management, soil health, and resource efficiency, promoting more sustainable and resilient agricultural systems. Their work includes the application of drones, sensor networks, and automated machinery to optimize precision farming practices, enabling farmers to make data-driven decisions that enhance productivity while minimizing environmental impact.

The faculty is also actively engaged in educational initiatives, offering training programs and academic courses focused on smart farming technologies. By collaborating with industry partners, government institutions, and research organizations, the Faculty of AgriSciences plays a vital role in transferring scientific knowledge into real-world applications, ensuring that the latest technological advancements are effectively integrated into the agricultural sector.

Mendel University's strong commitment to precision agriculture positions it as a key contributor to the digital transformation of farming, supporting both research and practical implementations that improve efficiency, sustainability, and the overall competitiveness of modern agriculture.

9.2.6. Czech institute for agri-food research and innovation (https://www.czpvi.cz/en)

The Czech Institute for Agri-Food Research and Innovation (CIAFRI) plays a crucial role in advancing precision farming by bridging the gap between research and practical applications in the agricultural and food sectors. Established in 2013, the institute is dedicated to developing and implementing innovative technologies that enhance the efficiency, sustainability, and resilience of modern agriculture.

CIAFRI focuses on precision farming solutions that integrate digital tools, automation, and data-driven decision-making to optimize crop production, soil management, and resource efficiency. The institute is involved in research on remote sensing, GIS-based analytics, and IoT-enabled monitoring systems, helping farmers adopt smart farming techniques that improve productivity while reducing environmental impact.

The institute also collaborates with academic institutions, industry partners, and policy-makers to ensure that scientific advancements in precision agriculture are translated into practical, real-world solutions. By providing research-based recommendations, pilot projects, and training programs, CIAFRI supports farmers and agribusinesses in adopting modern agricultural technologies.

9.2.7. University of South Bohemia in České Budějovice (https://www.jcu.cz/en/)

The University of South Bohemia is actively engaged in precision agriculture research, focusing on technological advancements for both crop and livestock production. Through its interdisciplinary approach, the university integrates smart farming techniques, leveraging digital tools, automation, and data analytics to enhance efficiency, productivity, and sustainability in modern agriculture.

Research at the university explores the application of remote sensing, IoT-based monitoring systems, and precision livestock farming solutions to improve farm management and optimize resource use. In crop production, studies focus on soil health, precision irrigation, and sensor-driven monitoring, enabling farmers to make data-informed decisions that enhance yields while minimizing environmental impact. In livestock farming, the university develops technologies for real-time animal monitoring, precision feeding, and automated health assessment, contributing to more efficient and welfare-oriented livestock management.

Through collaborations with industry partners, research institutions, and agricultural organizations, the University of South Bohemia ensures that its scientific advancements are effectively transferred to real-world farming applications.

9.2.8. Czech Agrarian Chamber (https://www.akcr.cz/)

The Czech Agrarian Chamber plays a key role in promoting precision farming by advocating for technological advancements and sustainable agricultural practices within the Czech Republic. As a representative body for the agrarian sector, the chamber actively supports the adoption of digital and automated solutions to enhance efficiency, resource management, and environmental sustainability in modern farming.

A significant part of its mission involves facilitating cooperation and knowledge exchange among farmers, research institutions, technology providers, and policy-makers. The chamber helps drive innovation by encouraging the integration of smart farming techniques, including remote sensing, GIS-based precision agriculture, IoT-enabled monitoring systems, and automation in both crop and livestock production.

By advocating for policies that support the digital transformation of agriculture, the Czech Agrarian Chamber ensures that farmers have access to funding opportunities, training, and new technologies that improve productivity while reducing the environmental footprint of agricultural activities. Through its initiatives, the chamber fosters a more connected, data-driven, and resilient agricultural sector, positioning Czech farmers at the forefront of modern, sustainable precision farming.

9.2.9. Bio East (https://www.bioeast.eu/) / Bio East Hub https://www.bio-hub.cz/en/

BioEast is a regional initiative that unites Central and Eastern European countries to advance the bioeconomy through collaboration, innovation, and knowledge exchange. With a strong emphasis on sustainable agriculture, forestry, and bio-based industries, BioEast aligns with precision farming by promoting the adoption of modern technologies to optimize agricultural production while minimizing environmental impact.

The BioEast Hub Czech Republic, as part of this broader initiative, plays a crucial role in supporting the digital transformation of agriculture. The hub actively promotes precision farming by facilitating the integration of smart farming technologies, including remote sensing, IoT-based monitoring, GIS applications, and AI-driven decision support systems. Through research, pilot projects, and partnerships, the hub helps farmers, agribusinesses, and policymakers implement data-driven agricultural solutions that enhance efficiency, sustainability, and climate resilience.

9.3. CROATIA

9.3.1. Digital Agro-Agrigentum d.o.o. (https://digitalagro.eu/)

Digital Agro - Agrigentum d.o.o. specializes in precision farming solutions, helping farmers transform raw agricultural data into actionable insights by integrating agronomic knowledge with advanced technological tools. Their mission is to enable farmers to achieve both sustainable development and profitability through the implementation of agrotechnological innovations.

The company focuses on data-driven decision-making, utilizing technologies such as IoT-based monitoring, remote sensing, and AI-powered analytics to optimize key agricultural processes, including soil management, crop monitoring, and precision irrigation. By providing customized digital solutions, Digital Agro supports farmers in maximizing yield efficiency, reducing input costs, and minimizing environmental impact.

A core aspect of their work involves ensuring that farmers of all scales can effectively integrate smart farming technologies into their daily operations. Through training, consulting, and digital infrastructure development, they facilitate the transition toward precision agriculture, enhancing both productivity and resource sustainability.

By bridging the gap between agronomic expertise and technological advancements, Digital Agro - Agrigentum d.o.o. plays a crucial role in modernizing agricultural practices, making precision farming more accessible, efficient, and environmentally responsible for farmers aiming to stay competitive in a rapidly evolving industry.

9.3.2. Ministry of Agriculture, Forestry and Fisheries (https://poljoprivreda.gov.hr/)

The Croatian Ministry of Agriculture, Forestry, and Fisheries plays a pivotal role in advancing precision farming by integrating technology-driven solutions into agricultural policy and rural development strategies. As part of its mission to enhance efficiency, sustainability, and competitiveness in the agricultural sector, the Ministry actively supports the adoption of smart farming technologies to improve resource management, productivity, and environmental protection.

A key focus of the Ministry's work on precision agriculture includes promoting the use of digital tools, such as remote sensing, GIS-based farm management, IoT-enabled monitoring systems, and data-driven decision-making platforms. These technologies help farmers optimize crop production, soil management, irrigation efficiency, and pest control, ensuring sustainable farming practices that align with EU agricultural and environmental policies.

Through policy development, the Ministry facilitates market and structural support programs that encourage investments in smart farming equipment, automation, and climate-resilient agricultural technologies. By integrating precision agriculture into broader initiatives on agroecology, plant production, and animal breeding, it ensures that innovation contributes to both economic growth and sustainable rural development.

Additionally, the Ministry plays a crucial role in knowledge transfer and capacity building, offering funding mechanisms and educational initiatives to help farmers transition to data-driven agriculture. By collaborating with research institutions, industry stakeholders, and European policy frameworks, the Croatian Ministry of Agriculture, Forestry, and Fisheries actively supports the modernization of Croatian agriculture, fostering a future that is more efficient, resilient, and environmentally sustainable through precision farming.

9.3.3. University of Zagreb – Faculty of Agriculture (https://www.agr.unizg.hr/)

The Faculty of Agriculture at the University of Zagreb plays a crucial role in advancing precision farming through education, research, and innovation. Committed to developing highly qualified experts, the faculty integrates cutting-edge scientific knowledge and technological advancements to enhance modern agricultural practices.

Through its research programs, the faculty focuses on digital agriculture, utilizing remote sensing, GIS-based farm management, IoT-enabled monitoring systems, and AI-driven analytics to optimize crop production, soil management, and resource efficiency. By fostering innovation in precision irrigation, automated machinery, and smart livestock management, the faculty contributes to the sustainability and competitiveness of Croatian agriculture.

In addition to research, the faculty provides high-level academic training in smart farming technologies, ensuring that students gain practical and theoretical expertise in data-driven agriculture. Through collaborations with industry stakeholders, research institutions, and international networks, the Faculty of Agriculture facilitates the transfer of knowledge and technology, enabling farmers and agribusinesses to implement efficient and environmentally sustainable farming solutions.

9.3.4. Faculty of Agrobiotechnical Sciences in Osijek (https://www.fazos.unios.hr/en)

The Faculty of Agrobiotechnical Sciences Osijek is committed to advancing precision farming through a multidisciplinary approach that integrates education, research, and technological innovation. By fostering critical thinking and creativity, the faculty plays a key role in developing and implementing smart agricultural solutions that enhance efficiency, productivity, and sustainability.

A strong focus is placed on digital agriculture, where the faculty applies remote sensing, IoT-based monitoring systems, GIS applications, and AI-driven analytics to optimize crop production, soil management, and resource efficiency. Research initiatives explore precision irrigation, automated farming technologies, and sensor-based livestock monitoring, ensuring that students and professionals are equipped with cutting-edge knowledge for the agricultural sector's digital transformation.

Through collaboration with industry leaders, research institutions, and policy-makers, the faculty facilitates the transfer of knowledge and technology to farmers and agribusinesses, supporting the adoption of data-driven agricultural practices. By integrating precision farming methodologies into both education and applied research, the Faculty of Agrobiotechnical Sciences Osijek contributes to the sustainable development of agriculture in Croatia, ensuring its adaptability to modern challenges and its long-term competitiveness.

9.3.5. Croatian Agriculture and Food Agency (https://www.hapih.hr/about-us/)

The Croatian Agency for Agriculture and Food (HAPIH) plays a key role in advancing precision farming by providing expert and scientific support to the Ministry of Agriculture and fostering innovation in agricultural production. With a strong focus on food safety, sustainability, and technological advancement, HAPIH collaborates with Croatian institutions and international organizations, including the European Food Safety Authority (EFSA), to ensure that modern agricultural practices align with scientific standards and policy frameworks.

HAPIH is actively involved in research and development activities, promoting the use of digital technologies and smart farming solutions to enhance crop and livestock management. The agency supports the adoption of remote sensing, IoT-based monitoring, and AI-driven analytics to improve precision irrigation, fertilization, and pest management, contributing to increased efficiency and sustainability in Croatian agriculture.

By facilitating technology transfer, HAPIH ensures that farmers and agribusinesses have access to the latest advancements in precision farming, helping them make data-driven decisions that optimize yield, resource use, and environmental impact. Through its commitment to scientific excellence and innovation, HAPIH significantly contributes to the modernization and competitiveness of Croatia's agricultural sector, reinforcing its role in the digital transformation of farming.

9.3.6. Pinova d.o.o. (https://pinova.hr/en/)

Pinova Ltd. is a technology company specializing in precision farming solutions, leveraging its deep agricultural expertise to develop digital tools that enhance food production management. The company focuses on creating a comprehensive database for agricultural production and developing advanced technologies for microclimatic monitoring, enabling farmers to make data-driven decisions that optimize crop management, resource efficiency, and sustainability.

By integrating IoT sensors, remote sensing, and smart analytics, Pinova provides real-time data on microclimatic conditions, helping farmers anticipate weather risks, optimize irrigation and fertilization, and improve overall farm productivity. The company's digital solutions enable continuous monitoring of environmental factors that influence soil health, plant growth, and disease prevention, contributing to more efficient and resilient agricultural practices.

Pinova's commitment to precision agriculture extends beyond technology development, as it actively promotes the adoption of smart farming solutions through research collaborations and knowledge transfer initiatives. By combining agronomic expertise with cutting-edge digital innovations, Pinova Ltd. plays a vital role in the modernization and sustainability of agricultural production, ensuring that farmers can maximize yields while reducing their environmental footprint.

9.4. SLOVENIA
9.4.1. Termodron d.o.o. (https://termodron.si/)

ThermoDRON is a technology-driven company specializing in precision agriculture, leveraging thermal imaging, drone technology, and remote sensing to enhance agricultural efficiency and sustainability. By integrating advanced thermal diagnostics, ThermoDRON provides data-driven solutions for crop monitoring, irrigation management, and early stress detection, enabling farmers to make informed decisions that optimize resource use and maximize yields.

Equipped with state-of-the-art drones and high-precision thermal sensors, the company conducts real-time assessments of agricultural land, identifying issues such as water stress, plant diseases, and soil variability before they impact productivity. Through remote sensing analytics, ThermoDRON helps farmers implement targeted interventions, reducing unnecessary input use and improving precision irrigation and fertilization strategies.

Beyond data collection, ThermoDRON transforms raw agricultural data into actionable insights through advanced analytical tools, offering farmers customized reports and recommendations to enhance overall farm performance. Its commitment to precision farming supports sustainability efforts, ensuring that agricultural practices become more efficient, environmentally responsible, and resilient to climate variability.

By combining cutting-edge drone technology with agronomic expertise, ThermoDRON plays a key role in the digital transformation of agriculture, helping farmers adopt innovative, cost-effective, and sustainable farming solutions that improve productivity and long-term farm viability.

9.4.2. ITC - Innovation Technology Cluster (https://itc-cluster.com/)

The Innovation Technology Cluster (ITC) in Murska Sobota is a leading force in digital transformation within the agri-food sector, integrating ICT solutions to enhance precision farming and sustainable rural development. Through DIH AGRIFOOD, ITC specializes in IoT, AI, blockchain, big data, and robotics, driving the adoption of smart farming technologies that improve efficiency, productivity, and environmental sustainability in agriculture.

By leveraging real-time data analytics, automated farm management systems, and sensor-based monitoring, ITC enables farmers and agribusinesses to make data-driven decisions that optimize crop production, irrigation, and resource management. The cluster fosters innovation in digital agriculture, supporting the development of AI-powered decision support tools, precision irrigation systems, and blockchain-based traceability solutions for enhanced transparency in the food supply chain.

ITC plays a crucial role in knowledge transfer and collaborative innovation, working closely with research institutions, technology providers, and policymakers to promote sustainable rural innovation. By bridging the gap between research and practical applications, ITC ensures that farmers have access to cutting-edge technological advancements, helping them transition to climate-smart and precision-driven agricultural practices.

Through its multidisciplinary approach, ITC Murska Sobota actively shapes the future of precision farming, strengthening the resilience and competitiveness of the agricultural sector while fostering sustainable growth in rural communities.

9.4.3. CAFS - Chamber of Agriculture and Forestry of Slovenia (https://www.kgzs.si/cafs)

The Chamber of Agriculture and Forestry of Slovenia (CAFS) plays a crucial role in promoting precision farming by supporting the modernization and digital transformation of Slovenian agriculture. As the key representative body for farmers, foresters, and rural stakeholders,

CAFS advocates for the adoption of smart farming technologies to improve efficiency, productivity, and sustainability in agricultural practices.

Through its initiatives, CAFS facilitates the implementation of precision farming solutions, including remote sensing, GIS-based farm management, IoT-enabled monitoring systems, and AI-driven analytics. These technologies help optimize crop production, livestock management, resource efficiency, and climate resilience, enabling farmers to make data-driven decisions that enhance yields while reducing environmental impact.

CAFS is also actively involved in education and advisory services, providing farmers with training programs, workshops, and technical support to ensure the effective integration of smart agriculture solutions. Additionally, the chamber collaborates with research institutions, policymakers, and industry stakeholders to shape policies and funding programs that support the digitalization of agriculture.

By fostering innovation, knowledge transfer, and sustainable farming practices, the Chamber of Agriculture and Forestry of Slovenia plays a vital role in advancing precision agriculture, ensuring that Slovenian farmers remain competitive and well-equipped to meet the challenges of modern agriculture.

9.4.4. AIS - Agricultural Institute of Slovenia (https://www.kis.si)

The Agricultural Institute of Slovenia (Kmetijski inštitut Slovenije, KIS) is the country's leading public research institution in agriculture, actively contributing to the advancement of precision farming through scientific research, technological innovation, and advisory services. Established in 1898, KIS conducts fundamental, applied, and developmental research across various agricultural disciplines, integrating modern digital tools and smart farming technologies to optimize crop production, resource management, and sustainability.

A key aspect of KIS's precision farming focus lies in its research on plant breeding, genetics, and physiology, where data-driven approaches, such as remote sensing, AI-driven analytics, and IoT-based monitoring systems, enhance the efficiency of crop management and genetic improvement programs. The institute also explores innovative cultivation techniques, applying sensor technology and automation to optimize field, fodder, and vegetable crop production.

KIS plays a vital role in sustainable agriculture, managing the Slovene Plant Gene Bank, which ensures the conservation of autochthonous and old plant varieties while integrating modern breeding techniques that align with climate resilience and environmental sustainability. The institute provides laboratory analyses, quality assessments, and advisory services, supporting farmers with scientific expertise to facilitate the adoption of precision agriculture solutions.

By collaborating with government agencies, research institutions, and industry partners, the Agricultural Institute of Slovenia fosters the development and transfer of knowledge in

precision farming, ensuring that Slovenian agriculture remains innovative, sustainable, and competitive in the era of digital transformation.

9.5. POLAND

9.5.1. The Innovation Center of the University of Agriculture in Krakow Ltd. (https://innowacje-ur.pl/en/home/)

The Innovation Center of the University of Agriculture in Krakow Ltd. is dedicated to advancing precision agriculture through research, technological innovation, and knowledge exchange. By leveraging cutting-edge digital tools and smart farming technologies, the center focuses on optimizing agricultural practices, enhancing efficiency, and promoting sustainability in modern farming.

Actively engaged in collaborative research, the center explores the integration of IoT-based monitoring, remote sensing, GIS applications, and AI-driven analytics to improve crop management, soil health, and resource efficiency. Through its knowledge transfer initiatives, the center plays a key role in bridging scientific research with practical applications, ensuring that farmers and agribusinesses can effectively implement data-driven decision-making in their operations.

The center is also committed to fostering partnerships and international cooperation, particularly through digital innovation hubs, to facilitate the exchange of expertise and best practices in precision agriculture. By integrating emerging technologies with agronomic expertise, the Innovation Center of the University of Agriculture in Krakow Ltd. contributes to the digital transformation of agriculture, helping to create more resilient, efficient, and environmentally responsible farming systems.

9.5.2. Agricultural University in Cracow (https://urk.edu.pl/en/)

The Agricultural University in Cracow is actively engaged in advanced research in precision agriculture, integrating cutting-edge technologies to optimize agricultural practices and promote sustainable farming solutions. The university focuses on digital innovation in agriculture, applying remote sensing, IoT-based monitoring, GIS applications, and AI-driven analytics to enhance crop management, soil health assessment, and resource efficiency.

Through interdisciplinary research, the university develops smart farming solutions that improve precision irrigation, automated machinery, and sensor-based monitoring systems, enabling farmers to make data-driven decisions that maximize yields while minimizing environmental impact. The university also plays a key role in technology transfer, collaborating with industry partners, research institutions, and policymakers to ensure the practical implementation of precision farming methodologies.

By fostering innovation, education, and collaboration, the Agricultural University in Cracow contributes to the digital transformation of agriculture, equipping future agronomists and

farmers with the skills needed to adopt sustainable, technology-driven, and highly efficient farming practices.

9.5.3. Polish Ministry of Agriculture and Fisheries (particularly Department of the Innovation, Digitisation and Transfer of Knowledge (https://www.gov.pl/web/agriculture)

The Ministry of Agriculture, Forestry, and Fisheries plays a crucial role in promoting precision farming by integrating digital technologies and data-driven strategies into agricultural policies and rural development initiatives. As the governing body responsible for agriculture, forestry, and fisheries, the Ministry actively supports the modernization and sustainability of the agricultural sector through smart farming solutions.

A key focus of the Ministry is facilitating the adoption of precision agriculture technologies, such as remote sensing, IoT-enabled monitoring, GIS-based farm management, and AI-driven analytics. These tools enhance crop management, soil health monitoring, and resource efficiency, helping farmers optimize irrigation, fertilization, and pest control while minimizing environmental impact.

The Ministry also plays a pivotal role in structural support programs that provide funding and incentives for the integration of automation, digital tools, and climate-smart agricultural practices. By aligning precision farming advancements with agricultural policy and rural development strategies, it ensures that farmers have access to innovative technologies and sustainable farming practices.

Through collaboration with research institutions, industry stakeholders, and European policy frameworks, the Ministry promotes knowledge transfer and education on digital agriculture. By fostering the widespread adoption of precision farming, it contributes to a more resilient, competitive, and environmentally sustainable agricultural sector.

9.5.4. The Agency for Restructuring and Modernisation of Agriculture (https://www.gov.pl/web/arimr-en)

The Agency for Restructuring and Modernisation of Agriculture (ARMA) plays a key role in supporting the adoption of precision farming in Poland by facilitating financial support, modernization initiatives, and rural development programs. As an accredited paying agency, ARMA manages EU and national funds, ensuring that farmers and agribusinesses have access to resources for technological advancements and digital transformation in agriculture.

A significant part of ARMA's mission involves promoting precision agriculture solutions, such as remote sensing, IoT-based monitoring, GIS applications, and AI-driven analytics. By providing funding and incentives for the implementation of smart farming technologies, ARMA helps optimize crop management, soil health, and resource efficiency, ensuring that farmers can integrate data-driven decision-making into their operations.

Beyond financial support, ARMA is an active stakeholder in agricultural innovation, working closely with research institutions, industry leaders, and policymakers to encourage the modernization of farming practices. By fostering sustainability, digitalization, and competitiveness, ARMA plays a crucial role in advancing precision farming in Poland, ensuring that agricultural businesses remain resilient, efficient, and environmentally responsible in the evolving European agricultural landscape.

9.5.5. Powiat Bielski (https://powiat.bielsko.pl/)

The Starostwo Powiatowe w Bielsku-Białej (County Office in Bielsko-Biała) oversees various departments, including the Wydział Ochrony Środowiska, Rolnictwa i Leśnictwa (Department of Environmental Protection, Agriculture, and Forestry), which manages agricultural affairs within the county. This department is pivotal in implementing agricultural policies and supporting initiatives that could encompass precision farming techniques.

Given the increasing recognition of precision agriculture's benefits—such as enhanced productivity, resource efficiency, and environmental sustainability—there is potential for Powiat Bielski to explore and promote PF practices. By integrating technologies like GPS-guided equipment, remote sensing, and data analytics, local farmers can optimize input usage and improve crop management.

To advance precision farming within the county, collaboration between the regional authority, agricultural advisory services, and local farmers is essential. Such partnerships can facilitate knowledge exchange, provide access to modern technologies, and support the adoption of innovative farming practices, ultimately contributing to the sustainable development of agriculture in Powiat Bielski.

9.5.6. Powiat Zywiecki (https://zywiec.powiat.pl/en/)

The Żywiec County (Powiat Żywiecki), located in southern Poland, has a rich agricultural heritage, with farming playing a significant role in its local economy. The county has developed the "Strategia Rozwoju Powiatu Żywieckiego 2030+" (Development Strategy of Żywiec County 2030+), which outlines plans for future growth and development.

Precision agriculture, also known as smart farming, involves the use of advanced technologies such as GPS, sensor technology, ICT, and robotics to provide plants or animals with precisely the treatment they need, determined with great accuracy. This approach allows for optimized production and more sustainable farming practices.

Given the global trend towards digitalization in agriculture, there is potential for Żywiec County to explore and implement precision farming techniques. By integrating modern technologies into traditional farming practices, the county could enhance productivity, resource efficiency, and environmental sustainability. Engaging with local agricultural institutions, extension services, and technology providers could facilitate the adoption of

precision agriculture, benefiting the farming community and contributing to the county's sustainable development goals.

9.5.7. Powiat Cieszyński (https://cieszyn.powiat.pl/)

The Cieszyn County (Powiat Cieszyński), located in southern Poland, is characterized by a diverse agricultural landscape. While specific data on the adoption of precision farming within the county is limited, the region's agricultural profile suggests potential for integrating modern farming technologies.

Precision agriculture, or precision farming, involves utilizing digital techniques to monitor and optimize agricultural production processes. This approach aims to increase output quality and quantity while minimizing input use, thereby reducing environmental impact. Key technologies in precision agriculture include sensor technologies, satellite navigation, and the Internet of Things (IoT).

In Poland, the adoption of precision agriculture varies, with larger farms in the northern and northwestern regions more likely to implement such technologies. Factors influencing adoption include farm size, topography, and soil variability. The southern regions, including areas like Cieszyn County, typically have smaller farm sizes, which may present challenges for the widespread adoption of precision farming practices.

However, the benefits of precision agriculture—such as optimized input use, increased efficiency, and reduced environmental impact—are universally applicable. For regions like Cieszyn County, collaborative efforts among local farmers, agricultural advisory services, and research institutions could facilitate the adoption of precision farming practices. Tailoring these technologies to the specific needs and scales of local farms can enhance productivity and sustainability in the region.

9.5.8. ślaski ośrodek Doradztwa Rolniczego w Częstochowie (https://www.czwa.odr.net.pl/)

The Silesian Agricultural Advisory Centre in Częstochowa (ŚODR) plays a key role in supporting the adoption and development of precision farming in the Silesian Voivodeship by providing economic, technical, and technological advisory services to farmers and agribusinesses. As a state organizational unit, ŚODR focuses on knowledge transfer, capacity building, and innovation support in agriculture, promoting modern farming techniques that enhance efficiency, sustainability, and competitiveness.

A core aspect of ŚODR's precision farming activities includes advising farmers on the integration of digital and automated technologies such as GIS-based farm management, remote sensing, IoT-enabled monitoring systems, and AI-driven analytics. By facilitating the implementation of smart farming solutions, the advisory center helps optimize crop production, soil management, and resource efficiency, ensuring more sustainable and profitable agricultural operations.

ŚODR also provides training, workshops, and field demonstrations, equipping farmers with the skills necessary to adopt precision agriculture technologies effectively. The center collaborates with research institutions, agritech companies, and policy-makers to drive innovation and ensure that the latest advancements in precision farming are accessible to the agricultural community in Silesia.

9.5.9. Urząd Marszałkowski Województwa Śląskiego (https://slaskie.pl/)

The regional authority of the Silesian Voivodeship (Śląskie Voivodeship) plays a critical role in the development and implementation of regional agricultural strategies, including the promotion of precision farming as part of broader sustainability and innovation-driven policies. As the governing body responsible for agriculture, rural development, and environmental management, the authority integrates modern agricultural technologies into both regional strategies and the implementation of national policies at the local level.

A key focus of the authority is supporting the digital transformation of agriculture through smart farming initiatives, including GIS-based farm management, IoT-enabled monitoring systems, AI-driven decision-making tools, and remote sensing applications. These technologies help optimize crop and livestock production, improve resource efficiency, and enhance climate resilience, ensuring that agricultural activities align with sustainability goals and EU environmental standards.

The regional authority also facilitates funding programs and incentive schemes to encourage farmers and agribusinesses to adopt precision agriculture solutions. Through partnerships with research institutions, advisory centers, and innovation hubs, it fosters the transfer of knowledge and technological advancements to ensure the practical implementation of precision farming techniques across the region.

By integrating precision agriculture into regional planning, the Silesian Voivodeship authority supports the modernization of the agricultural sector, improving productivity, sustainability, and competitiveness, and ensuring that farmers and rural communities benefit from the latest advancements in smart and data-driven farming.

9.5.10. The RESET science club by University of Bielsko-Biała, Poland (https://reset.ubb.edu.pl/o-nas)

The RESET Science Club is a dynamic hub for computer science and emerging technologies, fostering innovation and interdisciplinary collaboration. While primarily focused on IoT, Game Development, and .NET technologies, the club's expertise and technological foundation align well with applications in precision farming, particularly in the development of smart agriculture solutions.

By leveraging IoT technologies, the club can contribute to real-time agricultural monitoring, creating sensor-based systems for soil moisture detection, climate tracking, and automated irrigation management. Their expertise in software development also enables the design of

data-driven farm management platforms, integrating remote sensing, AI analytics, and GIS mapping to support precision agriculture practices.

Through innovative projects, the RESET Science Club has the potential to collaborate with agricultural researchers, agritech companies, and smart farming initiatives to develop cutting-edge tools that enhance resource efficiency, automation, and sustainability in farming. Their focus on new technologies and IoT solutions positions them as a valuable contributor to the digital transformation of agriculture, supporting the advancement of precision farming applications.

9.6. HUNGARY

9.6.1. University of Óbuda (https://amk.uni-obuda.hu/en/fooldal-english/)

The aim of the Precision Farming Expert training at Obuda University, Alba Regia Faculty is to present the achievements of modern technologies and their integration into precision farming. The training is practice-oriented, i.e. in addition to the necessary theoretical knowledge, the emphasis is on practical applications and the acquisition of modern technologies at skill level. In this context, the student will learn about the tools for data collection, data sources and methods of data evaluation needed to support spatial decision making. The course also aims at providing a practical introduction into the whole process of thematic information extraction, from planning and extraction to the integration of results into decision making. The practical part of the training will include demonstrations of precision machines, sensors and UAV flights for data extraction. The training will conclude with an analysis of the impact of precision farming and a presentation of the environmental, sustainability and economic benefits.

9.6.2. Széchenyi István University, Mosonmagyaróvár (https://felveteli.sze.hu/precizios-mezogazdasagi-szakmernok-szaktanacsado)

Precision agricultural engineer/consultant. Collecting, processing and managing spatial data; contributing to decision-making. Knowledge elements, knowledge to be acquired: Technical, agrotechnological, GPS technological knowledge, geoinformation systems, knowledge of e-communication systems, Knowledge of farming, business, administration and management necessary for the exercise of the profession, knowledge of precision farming, arable farming, nutrient management, agrochemical, ecological and plant protection knowledge, knowledge of precision technologies for data collection, data integration, spatial decision support, knowledge of the operation of expert advice and decision support systems. At Széchenyi István University 42 English-taught programmes at all Academic levels will be on offer from September 2024. Bachelor level programmes include 10 English-taught degrees are available at Bachelors level, including nine BSc programmes in the following subjects: Food Engineering, Logistics Engineering, Agricultural Engineering, Agricultural Water Management & Environmental Technology Engineering, Civil Engineering, Vehicle Engineering, International Business Economics, Business Administration and Management and Sociology.

9.6.3. University of Debrecen (https://mek.unideb.hu/precizios-mezogazdasagi-mernok)

University of Debrecen starts a Bachelor (BsC) course named Precision Agricultural Engineer. The aim of the training is to train precision agricultural engineers who are capable of carrying out the planning and operational tasks of precision agricultural processes.

The students will be able to collect, organise, analyse and synthesise the data needed to create digital maps using specialised software, and to support management decisions and make recommendations based on their knowledge of the use and operation of specific precision agriculture equipment and infocommunication tools. The Bachelor of Precision Agriculture Engineering is designed to train students with specific specialised knowledge of the labour market and a high level of sectoral communication. Colleagues with teaching experience in precision farming topics provide students with real-life, theoretical and practical knowledge in the specific topics covered in the curriculum. Tamás Rátonyi is the head of the Department of Precision Technology and he is also the commissioned head of the department.

9.6.4. EÖTVÖS Loránd University (https://terkep.elte.hu/en/)

Eötvös Loránd University (ELTE) is actively engaged in precision farming research, particularly through its expertise in geoinformatics, remote sensing, and hyperspectral imaging. The university applies advanced spatial technologies to study plant and soil properties, contributing to the optimization of agricultural practices through data-driven decision-making.

A key focus of ELTE's precision agriculture research is the use of hyperspectral remote sensing to monitor crop health, soil conditions, and environmental factors. By integrating geospatial analysis, drone-based imaging, and AI-driven data processing, the university develops innovative methodologies for precision irrigation, fertilization management, and disease detection, ensuring more efficient and sustainable farming practices.

ELTE is also involved in the development of remote sensing technologies, including drone hyperspectral cameras, which are widely used in precision crop research and development. These technologies enable high-resolution monitoring of agricultural landscapes, helping farmers and researchers enhance yield prediction, soil moisture assessment, and vegetation stress detection.

By integrating geoinformatics and digital agriculture, Eötvös Loránd University plays a significant role in advancing smart farming solutions, bridging the gap between academic research and practical agricultural applications. Through collaborations with research institutions and industry partners, ELTE contributes to the digital transformation of agriculture, supporting a more sustainable, efficient, and technologically advanced farming sector.

9.6.5. Hungarian Precision Farming Association (https://www.preciziosklub.hu/)

The idea of founding the Hungarian Precision Farming Association was already mooted after the 1st PREGA conference, but at that time it was still only an idea.In 2017, they felt that the time had come to form an association representing the common interests of those who choose precision farming - be it arable farming, horticulture or livestock production -, those interested in the technology, and those who are active as traders or service providers in the 'precision market'. To raise awareness and acceptance of precision farming and digital agriculture, to disseminate their application and to share practical experience and new knowledge in Hungary.

9.6.6. Agricultural Economics Research Institute (AKI) (https://www.aki.gov.hu/)

The Agricultural Economics Research Institute (AKI), the legal predecessor of the Agricultural Economics Institute Non-Profit Ltd., was founded in 1954. For many decades, the Institute has been the most important public and state research and knowledge centre in Hungary, with significant agricultural economy databases and policy experience. One of the Institute's most important tasks is to develop proposals for Hungarian agricultural and rural policy makers and to base these proposals on research based on state-of-the-art methods, with a special focus on the application and implementation of the Common Agricultural Policy of the European Union in Hungary.

Their aim is to continue to develop an appropriate balance between professional knowledge, domestic and international scientific research and policy decision support. Continuous liaison and active professional engagement with professional organisations is an integral part of our daily work. To maintain close links with the farming community, information and research results are disseminated in an accessible, timely and appropriate format.

9.6.7. University of Pécs (https://international.pte.hu/)
The University of Pécs (PTE) is actively contributing to the advancement of precision farming, particularly in viticulture, through the integration of robotics, AI-driven monitoring systems, and automated vineyard management technologies. The university is involved in the development of an innovative, weather-independent robotic system designed to enhance efficiency, reduce labor shortages, and support sustainable vineyard management.

This autonomous vineyard robot utilizes image-based mapping, crop monitoring, and AI-powered decision-making to assist with yield estimation, crop quality assessment, and pruning optimization. By continuously observing the vineyard, the system helps evaluate vine health, productivity, and the effectiveness of pruning techniques, enabling data-driven adjustments for improved vineyard performance.

The project also supports smart viticulture training, as the knowledge gathered by the system allows for the modeling of specific pruning decisions, helping train future vineyard managers and agricultural specialists. Through collaborations with Innovitech Kft., Bay Zoltán Research Institute NKft., and SBS Kft., the University of Pécs provides viticulture expertise that ensures the precision farming solutions developed align with real-world vineyard needs.

By pioneering automated vineyard management, PTE is driving the transition to precision farming, leveraging robotics, machine learning, and sensor-based monitoring to create a more efficient, data-driven, and sustainable viticulture sector. Through technological innovation, the university plays a key role in shaping the future of smart farming and precision agriculture in Hungary and beyond.

9.6.8. KITE (https://pgr.hu/en)

KITE Zrt. is a leading provider of precision farming solutions, leveraging advanced IT integration to enhance the efficiency, productivity, and sustainability of modern agriculture. With fifty years of experience, the company has developed the PGR platform, a comprehensive digital system that enables data-driven decision-making for farms of all sizes.

Through precision agriculture technologies, KITE Zrt. offers tools for farm planning, resource optimization, and operational efficiency. The PGR platform integrates IoT-based monitoring, remote sensing, GIS applications, and AI-powered analytics, allowing farmers to improve yield prediction, soil health management, and input efficiency. These solutions help reduce waste, optimize fertilization and irrigation, and enhance climate resilience, ensuring sustainable agricultural production.

KITE Zrt. focuses on making precision farming accessible and applicable across different farm types, providing customized digital solutions that improve profitability and competitiveness. By integrating cutting-edge IT solutions with agricultural expertise, the company plays a crucial role in modernizing farming practices, ensuring that farmers can fully utilize technology-driven agriculture to meet the challenges of the future.

9.6.9. MAGEOSZ - Magyar Gépipari és Energetikai Országos Szövetség (https://mgk.u-szeged.hu/english)

The Hungarian National Association of Machinery and Power Engineering Industries is a civil professional association created on the 12th December 2007 by descending as the successors of Hungarian Association of Engineering Industries (MAGOSZ – founded in 1991) and Association for Power Equipment Manufacturers (EBSZ – founded in 1993). The mission of MAGEOSZ is the furtherance first of all in the field of the professional interest representation and conciliation and furthermore at the process of realization of innovative ideas, projects and conceptions for the energetic, engineering, designer, manufacturer, assembler enterprises and factories and for other civil organizations.

9.6.10. University of Szeged, Faculty of Agriculture (https://mgk.u-szeged.hu/english)

The University of Szeged, Faculty of Agriculture is a key institution in precision farming education and research, offering specialized training programs that integrate cutting-edge agricultural technologies. With a strong focus on agro-robotics and digital agriculture, the

faculty prepares professionals to apply automation, AI-driven decision-making, and sensor-based monitoring in modern farming practices.

A major emphasis of the faculty's precision agriculture training is on drone-based monitoring, which is one of the fastest-growing areas in smart farming. Students gain expertise in remote sensing, aerial imaging, and data analytics, enabling them to optimize crop management, irrigation efficiency, and pest control while reducing environmental impact. The university also offers postgraduate training programs in Sustainable Precision Horticulture, Medicinal Plants and Herbs Production and Processing, Precision Agricultural Management, and other specialized agricultural disciplines.

With more than 50 years of agricultural higher education experience in Hódmezővásárhely, the University of Szeged plays a pivotal role in training next-generation agronomists and engineers in precision farming methodologies. By combining academic excellence with hands-on technological training, the faculty supports the digital transformation of agriculture, ensuring that professionals are well-equipped to implement sustainable, efficient, and data-driven farming solutions.

9.6.11. University of Miskolc (https://mfk.uni-miskolc.hu/EN)

The University of Miskolc plays a significant role in precision agriculture, particularly through its Precision Soil Mapping Specialist/Specialist Engineer training program. This program focuses on soil analysis, geoinformatics, and advanced mapping techniques, equipping professionals with the skills needed to optimize soil management, resource efficiency, and precision farming practices.

The training emphasizes understanding soil properties, natural geography, and geomorphological relationships, allowing specialists to create detailed soil maps and define management zones for improved agricultural decision-making. By integrating modern field data collection tools, geospatial technologies, and geoinformatics methods, the program enables professionals to apply data-driven approaches to soil health assessment, fertilization planning, and irrigation optimization.

As a multidisciplinary university with expertise in earth and environmental sciences, engineering, informatics, and materials science, the University of Miskolc is well-positioned to advance precision farming technologies. Through its integration of digital mapping, GIS applications, and remote sensing techniques, the university supports the development of sustainable and efficient agricultural practices, ensuring that professionals trained in precision soil mapping contribute to the modernization of farming and the digital transformation of agriculture.

9.7. AUSTRIA
9.7.1. Josephinum Research (https://www.josephinum.at/en/forschung-und-pruefung.html)

Josephinum Research (JR) is a partially legal institution with its own legal personality at the Federal Institute of Education and Research Francisco Josephinum in Wieselburg and conducts research in close cooperation with its research institution BLT. The research focus of Josephinum Research lies in the development of methods and application of innovative technologies for agriculture, especially in the areas of digitization, precision farming, smart farming, sensor technologies, mechatronics and robotics and artificial intelligence, as well.

9.7.2. HBLFA Francisco Josephinum (https://www.josephinum.at/en/)

The Federal Institute of Education and Research Francisco Josephinum in Wieselburg is the largest agricultural school in Austria. The branches of study are "Agriculture", "Agricultural Engineering", "Food and Biotechnology" and "Information Technology in Agriculture".

9.7.3. University of Applied Sciences Wiener Neustadt (https://www.fhwn.ac.at/studiengang/agrartechnologie#top)

Campus Francisco Josephinum of the University of Applied Sciences Wiener Neustadt (FHWN) with the Bachelor program "Agrartechnology and Digital Farming" offers unique higher education in these areas in Austria.

9.7.4. ecoplus DIGITAL - House of digitalization (https://virtuelleshaus.at/en)

The "House of Digitalization" is the lighthouse project of Lower Austria's digitalization strategy - developed and implemented by ecoplus Digital. ecoplus The "House of Digitalisation" bundles know-how and services for SMEs in the field of digitalization in lower austria for all sectors.

9.7.5. Federal Ministry of Agriculture, Forestry, Regions and Watermanagement (https://info.bml.gv.at/en/)

The Federal Ministry of Agriculture, Forestry, Regions and Water Management (BML) of Austria focuses on managing agriculture, forests, water resources, and rural regions. It aims to ensure sustainable development, promote digitalization, and enhance the security of supply while supporting research, education, and innovative practices in these sectors.

9.7.6. University of Natural Resources and Life Sciences, Vienna (https://boku.ac.at/en/)

The University of Natural Resources and Life Sciences (BOKU) in Vienna is a leading institution in the fields of agricultural sciences, forestry, water management, and environmental management.

The Insitute of Agricultural Engineering at BOKU focuses on the application of technical solutions to optimize farming and land use, with an emphasis on modern technologies such as automation, digitalization, and sustainable resource management.

9.7.7. Saatbau Linz (https://www.saatbau.com/int/en/)

Saatbau Linz is a leading seed company based in Austria, specializing in the production and distribution of high-quality agricultural seeds. With a focus on innovation and sustainability, they offer a wide range of seeds for various crops, supporting farmers with reliable solutions for enhanced productivity.

9.7.8. Farmdok (https://www.farmdok.com/en/)

FARMDOK provides digital tools for planning and record keeping in agricultural management (FMIS).