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# 4Growth D4.4 - Synergy building with other European initiatives

## Work Package 4 - Observatory Data Collection and Analysis

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## 4Growth Consortium

	Participant organisation name	Short name	Country
1	STICHTING WAGENINGEN RESEARCH	WR	NL
2	EVENFLOW	EVF	BE
3	GEOPONIKO PANEPISTIMION ATHINON	AUA	EL
4	FOODSCALE HUB GREECE ASSOCIATION FOR ENTREPREUNERSHIP AND INNOVATION ASTIKI MI KERDOSKOPIKI ETAIREIA	FSH	EL
5	LE EUROPE LIMITED	LEE	IE
6	DAHEIM CORNELIA	FI	DE
7	SIMBIOTICA SL	VIZ	ES
8	EIGEN VERMOGEN VAN HET INSTITUUT VOOR LANDBOUW- EN VISSERIJONDERZOEK	EV ILVO	BE
9	INSTITUTO NAVARRO DE TECNOLOGIAS E INFRAESTRUCTURAS AGROALIMENTARIAS SA	INTIA	ES
10	CENTRE TECHNIQUE INTERPROFESSIONNEL DES FRUITS ET LEGUMES	CTIFL	FR
11	TEKNOLOGIAN TUTKIMUSKESKUS VTT OY	VTT	FI
12	AgriFood Lithuania DIH	LITH	LT
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## Glossary of terms and abbreviations

List of Abbreviations and Acronyms	
ADSs	Agricultural Digital Technologies
AI	Artificial Intelligence
APIs	Application Programming Interfaces
DIHs	Digital Innovation Hubs
EU	European Union
KPIs	Key Performance Indicators
ML	Machine Learning
MMFT	Market Monitoring & Forecasting Tool
SMFs	Small and Medium-sized farmers
UAVs	Unmanned Aerial Vehicles
WP	Work Package

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## Executive Summary

4Growth aims to contribute to the uptake of digital and data-driven solutions in agriculture and forestry by (i) documenting the current state-of-play and projecting the future evolution (forecasting and foresight) of the sector, (ii) making insights available to the wider community of decision makers and value chain actors – through the 4Growth Visualisation Platform, (iii) collecting a wide range of ground truth data and identifying key factors or constraints for uptake, and (iv) producing sets of key policy recommendations and best practices to encourage/facilitate further uptake.

Building synergies and nurturing an open expanding and sustainable ecosystem is a significant priority for 4Growth. Much of the project's work will be based on the experience, knowledge and/or data availability by other European initiatives.

The 4Growth deliverable D4.4 “Synergy Building with other European Initiatives – Draft 1” describes coordinated steps and ways to reach out to stakeholders, networks as well as other projects and initiatives relevant to 4Growth's objectives, through which knowledge exchange and best practices will be enhanced.

This deliverable aims to:

- Describe the methodology based on which 4Growth project will build these types of synergies with other European initiatives
- Provide a list of already identified EU projects, networks and initiatives and how it will be further extended during the implementation of the project
- Detail the project's concrete actions to reach out to these stakeholders and the scope of engagement.

This document is the first version of the deliverable “Synergy building with other European initiatives”, and part of WP4 – Observatory Data Collection and Analysis, that will be submitted to the European Commission by M4 (April 2024). The submission will coincide with the planning stage of wave one of data collection. It will then release subsequent reports on the activities and outcomes of this outreach at the end of each wave i.e., M12, M21 and M30 (D4.5, D4.6 and D4.7).

# 1. Introduction

This section provides an overview of the 4Growth project, focusing on its objectives, methodology and structure. The aim of this section is to highlight the project's key points for the reader to understand how the task of building synergies with other European initiatives described in the following sections fits within the overall project's structure.

## 1.1 Project Overview

4Growth is a Horizon Europe project comprising 13 partners from 9 EU Member States, with strong proposition and extensive involvement in digital agriculture and forestry activities.

The objective of 4Growth is to understand **where, how and to what extent digital and data technologies and infrastructure in agriculture and forestry are being adopted as well as to look into the flows of data in the agricultural and forestry data market**. It will do so by collecting a wide range of ground truth data via distributed observatories across Europe and identifying key factors or constraints for uptake. 4Growth will showcase the uptake through the "4Growth Visualisation Platform" that will combine powerful storytelling with advanced visualisation of market data. This will contribute to a deeper knowledge of what influences market adoption, which in turn will allow 4Growth to develop robust forecasts to guide policymaking and increase further uptake.

## 1.2 Project Methodology

4Growth will strive to (i) produce a solid understanding of the bigger picture of digital agriculture and forestry uptake as well as their fine details, (ii) make the collected insights accessible to the wider community, (iii) allow governance actors to make informed decisions based on solid data and projections and (iv) enable practitioners and value chain actors to adopt best practices and realise a wide range of socio-economic benefits.

This will be pursued through a multi-actor approach, with farmers, forestry actors, policymakers, market experts, and researchers working together in unison. In that regard, 4Growth has not only brought together an excellent blend of skills and capabilities among a cohort of partners with years of experience in the sector, but will also actively involve the wider community, linking with major projects, initiatives, and networks.

The activities of the project will commence with a dedicated effort to **understand the uptake of digital and data-driven solutions in agriculture and forestry (WP2)**. This will entail a thorough **state-of-the-art analysis (T2.1)** capturing the current level of uptake of the different technological solutions across the various applications in different agricultural and forestry disciplines. To that end, 4Growth will leverage the wealth of knowledge inside the consortium, e.g. having heavily contributed to SmartAgriHubs (WR/AUA) Smart-AKIS (AUA, WR, INTIA) and running the GSA/EUSPA market reports for years (LEE), enhancing it with rigorous desk research. The outputs of this activity will directly inform the creation of a novel **Digital Agriculture and Forestry Uptake Assessment Grid (T2.2)**, designed as a tool for the assessment of how a given digital or data-driven solution is used at an individual case basis. In addition, 4Growth will set up and operate the **4Growth Visualisation Platform (T2.3)** – a platform developed by industry experts Vizzuality – to **"capture the state of play and future evolution of digital agriculture and forestry"**, showcasing market insights, promoting powerful storytelling, and enabling direct interaction with data for value chain actors through dedicated widgets and APIs. In parallel to these tasks, 4Growth will look outward from its own activities to **analyse other innovative approaches to market monitoring (T2.4)** i.e., big-data enabled statistics, or the use of social media or online content mining to perform a rigorous review of the most suitable options for digital agriculture and forestry market analysis

which could be utilised moving forward and could help address any gaps in the 4Growth approach.

The 4Growth Visualisation Platform will strongly benefit from market insights (WP3) collected and interpreted by specialists in the consortium, who will create the **Market Monitoring and Forecasting Tool - MMFT (T3.1)**. This will ingest macro-level market data into a robust econometric model to produce an up-to-date and forward-looking picture of digital agriculture and forestry. The MMFT will have global coverage with an increased focus on Europe. The development of the MMFT will rely on the unique – industry wide – modelling tool built and maintained by LE-Europe on behalf of EUSPA for the last 10 years. To complement the MMFT, 4Growth will produce a **dedicated Foresight Module (T3.2)**, developed by foresight specialists - with strong track record in agriculture – Future Impacts.

In parallel to the aforementioned activities, 4Growth will gather “ground truth” data via the distributed **“4Growth Observatories” (WP4)**. The objective is to organise virtual observatories (T4.1) that operate at the juncture of two overlapping ecosystems:

- i. **a data ecosystem** characterised by federated digital innovation hubs and data-sharing infrastructure and
- ii. **a triple-helix ecosystem** whereby practitioners, tech providers, researchers and institutional actors work hand in hand towards a more sustainable and digitally-driven agriculture and forestry sector.

The observatories clearly form an important basis for the analytical approach. They are existing, well-established networks that act as living labs in which various actors – including farmers and foresters – are co-creating and testing digital solutions in agriculture and forestry under changing farming conditions. 4Growth will use their experiences and digital solutions to collect data and analyse them. After synthesising this information, it will be fed back into the observatories and underlying networks so that they can use this to adapt their practices and strategies. In this way, a co-creation process between the 4Growth project and the observatories will be established through which the 4Growth project will gradually become part of these living labs.

Rather than conducting all data gathering at the beginning of the project, these analyses will be conducted in three “waves”. This will ensure the project stays up to date with the latest and most-cutting edge developments in the world of digital agriculture and forestry throughout the three-year project duration. Data collection will be aided by the use of the aforementioned digital agriculture and forestry uptake assessment grid.

In parallel, 4Growth will carry out a combination of key activities towards Impact Maximisation (WP5). To that end, the project will define and implement a concrete communication and dissemination (T5.1) strategy, including the development of communication tools tailored to target audiences. It will also actively pursue the dissemination of the project’s results through dedicated events, publications and participation in conferences and workshops. Moreover, given the strong innovation potential of the project, 4Growth will develop a dedicated innovation and IPR management (T5.2) strategy. This will be tightly tied to the elaboration of an overall exploitation and sustainability (T5.3) plan, which will build on the preliminary scenarios and guide the exploitation of the project outputs through and beyond the project’s lifetime. Impact maximisation work will be led by experts Evenflow and FoodScale Hub.

The strategic principles governing the exploitation, dissemination, and communication of 4Growth are as follows:

- **Strategic relationships and partnerships underpin the value of 4Growth.** Since a great deal of work is already ongoing in the area of digital agriculture and forestry, 4Growth’s role as an integrator, synthesiser and maintainer of a clear picture of the



current state-of-play is contingent on creating mutually beneficial information exchange interfaces with key digital agriculture and forestry actors (hubs, networks, centres of excellence, ongoing projects). Such relationships will allow 4Growth to maximise its impact through multiplier and network effects.

- **Communication will be grounded in practical demonstrations and interactive content.** The concept here is to present users with insights they can easily digest and interact with. This will be greatly facilitated by the modern user experience tools on the 4Growth Visualisation Platform and by powerful storytelling fed with the findings of the observatories. Simplicity and attractiveness will ensure greater traction with the various target groups.
- **Community-building and participatory approaches** will be utilised to create a sustainable momentum of engaged user, audiences and observers.

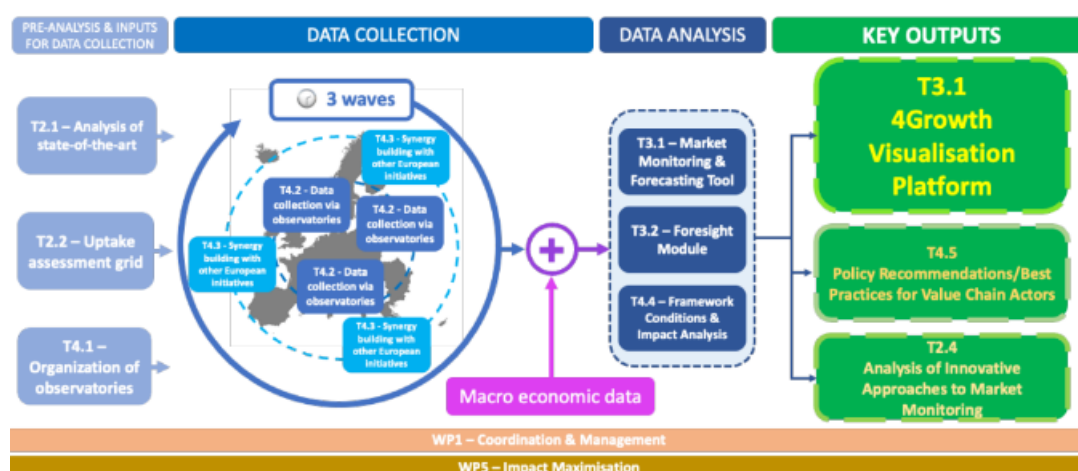


Figure 1: 4Growth overall methodology

## 2. Synergy building with other European initiatives

This task aims to build transdisciplinary links and synergies among stakeholders, networks as well as other projects and initiatives relevant to 4Growth (e.g. SmartAgriHubs, AKISs, EU CAP Network, etc.). The aim is to nurture an open, expanding, and sustainable ecosystem on digital technologies in agriculture and forestry in order to enhance knowledge exchange. Networks and synergies will allow 4Growth to:

- a) explore and harness further sources of quantitative and qualitative data on the uptake, use and impact of digital technologies which can inform the findings of 4Growth;
- b) share relevant resources such as databases;
- c) encourage the widespread exploitation of the 4Growth Visualisation Platform;
- d) investigate the creation of links with other initiatives sharing the same goals related to the deployment of digital technologies in agriculture and forestry; and
- e) allow the undertaking of joint communication and dissemination activities with other EU projects.

The starting point is that there are several initiatives and solutions, whereby one can access information on digital agriculture and forestry technologies, their application, and the associated benefits.

### 2.1 Methodology and strategy

The synergy building with other European initiatives is a cross-cutting (horizontal) task (T4.3) with direct impact on other 4Growth's tasks within WP4 and WP5.

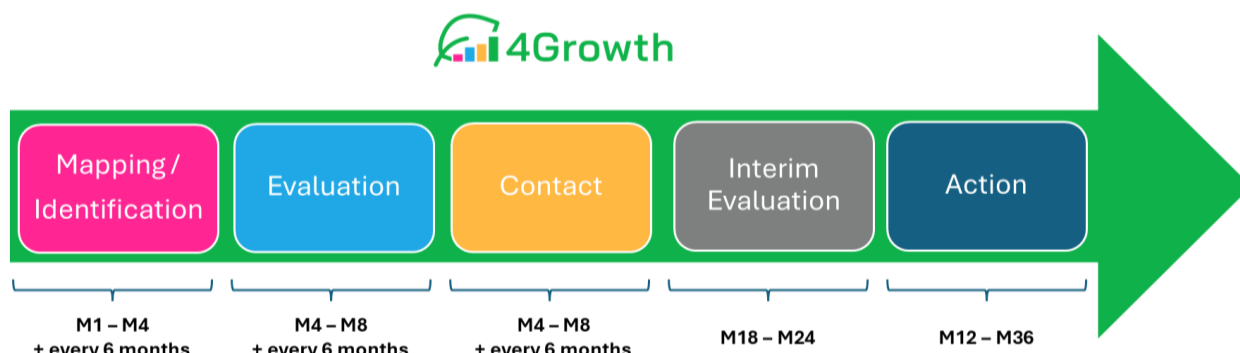
In the context of WP4 - Observatory Data Collection and Analysis, the outcomes of this task will:

- i. contribute to a thorough analysis of the framework conditions, governance models, data sharing practices, technical aspects and socioeconomic impact of the adoption/use of digital technologies (T4.4 - Framework conditions and impact analysis).
- ii. contribute to the production of some key outputs of the project, including policy recommendations for decision makers and governance actors to better facilitate and encourage the adoption of digital technologies in agriculture and forestry (T4.5 Policy Recommendations / Best Practices for Value Chain Actors).

When it comes to WP5 on impact maximisation, the task of synergy building with other European initiatives will directly contribute to the objective of the WP to promote the project itself and its findings to target audiences.

Finally, through building transdisciplinary links and synergies among stakeholders, networks as well as other projects and initiatives relevant to 4Growth, T4.3 will have substantial impact towards achieving the project's KPI of more than 50 cases of user uptake directly triggered by 4Growth feedback from communication and synergy building activities, while also indirectly contributing in other KPIs, namely more than 5,000 instances of data collection (utilisation of the Digital Agriculture and Forestry Uptake Assessment Grid), more than 50,000 unique visitors of Visualisation Platform by project's end and more than 1,000 social media followers and email alert subscribers.

The strategy for building synergies with other European initiatives is multifaceted and is described below. It is also visualised in figure 2.



**Figure 2:** 4Growth strategy of synergy building with other European initiatives

### Phase 1: Mapping and Identification

Engaging with European initiatives and projects is central to successfully understanding the uptake of digital and data-driven solutions in agriculture and forestry. However, not all initiatives have the same level and means of involvement and engagement. Therefore, the first step is to identify potentially mutually beneficial partnerships and synergies that could be interested in 4Growth project's work and results. The preliminary mapping and identification of EU initiatives for building synergies already took place during the proposal phase.

It officially started from M1 (January 2024) until M4 (April 2024) of 4Growth's implementation and is expected to continue throughout the whole project.

To effectively identify and initiate synergy building, a systematic approach within the 4Growth project has been adopted. Firstly, based on the work done during the proposal phase, a list of EU initiatives, in which 4Growth partners have been involved, has been developed. More details about the list can be found in table 2. At the same time, the initial list of EU, national and international initiatives has been further enriched through extensive research on online databases, such as CORDIS, as well as through contributions from project partners.

To facilitate this process, a synergy mapping template has been developed (Table 1), which was distributed to 4Growth's partners. This template served and will continue to serve as a dynamic tool for ongoing collaboration throughout the duration of the project.

**Table 1:** Synergy mapping template for project partners.

4GROWTH synergies and liaison mapping						
#	Type of Initiative	Full Name	Website	Initiative Leader	Focus Area	Potential Joint Activities
1						
2						
3						
4						
5						
6						
7						
8						

The “Potential Joint Activities” refers to a list of actions that 4Growth and the identified initiatives can build on and/or work together. In particular:

1. explore and harness further sources of quantitative and qualitative data on the uptake, use and impact of digital technologies which can inform the findings of 4Growth;
2. share relevant resources such as databases;
3. encourage the widespread exploitation of the 4Growth Visualisation Platform;
4. investigate the creation of links with other initiatives sharing the same goals related to the deployment of digital technologies in agriculture and forestry; and
5. allow the undertaking of joint communication and dissemination activities with other EU projects.

While filling the synergy mapping template, the project partners have been requested to identify in which of the four categories above, the initiative is relevant to.

Every six months, the synergy mapping template will be distributed to the project’s consortium. During the project’s regular meetings, including Project Management Team online meetings as well as WPs’ biweekly and monthly meetings, partners will also share information on this topic and provide updates.

Partners are also encouraged to actively contribute by adding potential projects, initiatives, working groups, networks, etc. that hold the potential for collaboration and synergy with 4Growth project.

## Phase 2: Evaluation

To ensure synergies will benefit the project and align with 4Growth’s objectives, each potential project, initiatives, and network will be assessed against the relevance, scope and potential for collaboration. In particular, 4Growth will assess the extent to which the objectives and focus areas of identified initiatives align with those of the project. This involves analysing the projects’ objectives and description as well as their deliverables to determine compatibility. The expertise and capacity of each initiative should also be taken into consideration during the evaluation process.

Furthermore, 4Growth will make use of the following qualitative/quantitative indicators:

- Relevance;
- Further dissemination of 4Growth’s Digital Agriculture & Forestry Uptake Assessment Grid and the Visualisation Platform;
- Estimated impact (e.g., visibility, added value);
- Potential
- Feasibility (e.g., timeline and resources);
- Terms for collaboration;

Finally, the issue of geographical relevance will be evaluated based on the geographical coverage and target regions of each initiative to safeguard relevance to 4Growth’s scope and target areas.

An aggregate score of the abovementioned evaluation criteria will be calculated, which will be consolidated with the information provided by partners, creating a priority list of initiatives, with the high-ranked initiatives indicating stronger potential for synergy building.

The Project Management Team, consisting of representatives from all WPs, will be responsible for the evaluation process and for generating the priority list.

The first evaluation phase will run from M4 (April 2024) until M8 (August 2024) and will be repeated every six months when project partners will have provided their proposal for new synergy building.

### **Phase 3: Contact**

Once the Project Management team will agree upon the synergies that should be established, the most appropriate approach for making contact will be decided on a case-by-case basis.

A tailored-made proposal synergy building proposal will be developed, providing the general framework as well as specific steps and expected outcomes. In addition, project partners will make use of their existing network and their involvement in other project and/or initiatives to reach out to the coordinators for making the first contact.

Another step is to establish regular communication with the stakeholders, provide updates on 4Growth's progress, address potential obstacles and seek feedback when necessary.

Finally, a more adaptive and flexible approach will be followed when it comes to the next steps and timeline of the synergy building since the responsiveness and availability of the contacted initiative have to be considered.

During the interim evaluation, all these issues will be addressed and analysed determining any follow-up or corrective actions.

### **Phase 4: Action**

The pathways and joint activities between 4Growth and other EU initiatives will be decided after discussions with their representatives and the project's consortium and will include (but are not limited to):

- Sharing data, inputs and/or outputs
- Joint policy events
- Coordinating research and/or joint publications
- Participation in the other's events and networks
- Links to project and project events on website, social media and other relevant online platforms and channels.

The envisaged timeline for the action phase is from M12 (December 2024) until the end of the 4Growth's end date (M36 – December 2026) and will go in line with the observatory data collection waves.

### **Interim evaluation**

Considering the strategic value of synergy building with other European initiatives throughout the project's implementation, it is of crucial importance to set up an extra layer of assessment throughout the duration of the project.

While the Project Management Team, consisting of representatives from all WPs, will monitor the implementation of this task and the follow-up deliverables D4.5, D4.6 and D4.7 will provide an extensive description of the synergy building process, a separate procedure has been identified, running from M18 (June 2025) until M24 (December 2025), which will look into detail on the progress achieved so far as well as the next steps.

The primary objective of the interim evaluation phase is to assess the progress of synergy-building efforts and make any necessary adjustments to enhance effectiveness and address

challenges. This phase serves as a crucial checkpoint to ensure that the task remains on track towards its goals and objectives.

First, the status of communication and collaboration efforts, as described in the contact phase, will be evaluated, focusing primarily on the level of engagement and responsiveness from the selected initiatives. This will determine the effectiveness of the communication channels and whether any improvement is needed at this stage. Second, the partners involved in the synergy building process will be asked to provide their feedback on the positive and negative aspects of these collaborations. Finally, depending on the feedback received, the Project Management Team in collaboration with 4Growth's partners will propose a set of actions to improve the synergy building process where necessary.

## 2.2 Related EU and national projects and activities from consortium partners

4Growth project consists of 13 partners from 9 EU Member States, with strong proposition and extensive involvement in digital agriculture and forestry activities. These activities include the partners active participation in other EU initiatives closely related to the objectives of 4Growth.

During the proposal phase, project partners identified and listed European and national projects and activities with participation or coordination of 4Growth partners and how the experiences and know-how will be exploited in 4Growth:

**Table 2:** *Related EU and national projects and activities from consortium partners*

Related EU and national projects and activities from consortium partners			
#	Title	4Growth partner involved	Link to 4Growth
1	Smart-AKIS	AUA, WR, INTIA	Extensive smart farming agriculture market and scientific article research, incl. several technologies/subsectors. Experience in gathering and handling data related to smart farming.
2	SmartAgriHubs	WR, AUA	Extensive experience in innovation/market analysis, development and sustaining of impactful, far-reaching initiatives in agri-tech.
3	FAIRSHARE	AUA, ILVO, INTIA, WR	Experience in data collection, analysis and the development of good practices to facilitate uptake of innovative agri-tools.
4	QuantiFarm	FSH	Experience of applying a comprehensive and independent assessment of costs, benefits, and sustainability gains (economic, environmental, social) under real-life conditions.
5	Robs4Crops	FSH	Experience in analysing impacts of digital technologies in agriculture.
6	ICAERUS	FSH, LITH	Experience in exploring new effects of new technologies in agriculture.
7	GSA MKD Lot 1	EVF, LEE	Direct exposure to digital agriculture and forestry as GNSS and EO-based solutions are included in the market monitoring and forecasting model with global coverage.
8	CYBELE	EVF, ILVO, WR	Extensive precision agriculture market research, spanning several technologies and subsectors (most



			notably HPC-enabled); Experience in innovation management and exploitation planning for cutting-edge digital agriculture technologies.
9	Portfolio of data visualisation platforms	VIZ	<ul style="list-style-type: none"> <li>• Forest Forward – Predicts distribution of commercially important tree species</li> <li>• LandGriffon - measurement &amp; management agricultural supply chain impacts.</li> <li>• TRASE - flow of global food commodities with focus on environmental impacts</li> <li>• Global Forest Watch (GFW) near real-time info about changes in our forests</li> <li>• ReFED Insights is a data and solutions hub for food waste reduction</li> <li>• Soils Revealed visualising changes of soil organic carbon stocks globally.</li> <li>• Climate Watch open climate data, visualisations on the global progress of climate change.</li> </ul>
10	Portfolio of relevant foresight studies	FI	<ul style="list-style-type: none"> <li>• “Future of Crop Protection in Europe” - study for the European Parliamentary Research Service, Scientific Foresight Unit (STOA)</li> <li>• “Precision agriculture and the future of farming in Europe” - scientific foresight study for the Directorate-General for Parliamentary research Services (European Parliament)</li> </ul>
11	Forestry-TEP platform	VTT	Forestry remote sensing expertise. Data platform management expertise.
12	EU AgroBRIDGES	VTT, WR	Expertise and results to be used in Agriculture sector of the project.
13	EU BIGPROD	VTT	Expertise in technology foresight. Methods to be used in data collections and analysis.
14	NOF – National Observatory of Forests	AUTH	Experience in forestry technology foresight. Methods to be used in data collections and analysis.
15	ICT-agri-food	ILVO	ILVO are responsible for network development and management within this project.
16	MISPA	CTIFL	Experience in evaluating impacts of cutting-edge agriculture innovations.

From the list provided above, there are some projects and initiatives that have already been finished (marked in red) but still have the potential to have substantial impact on 4Growth’s objectives, either through building on the expertise, experience and knowledge exchange, or through the exchange of data that these projects have already collected, managed and analysed. At the same time, there are projects and initiatives that can serve as platforms for creating synergies and building networks with other EU projects and initiatives, such as SmartAgriHubs (see [section 2.3.1](#)).

In these first four months of 4Growth implementation, project partners communicated to the consortium additional EU projects and initiatives that they participate in and fall under the scope of 4Growth’s objectives. More specifically:

- **AgriDataValue:** The ongoing EU-funded project aims to establish itself as the “Game Changer” in Smart Farming and agri-environmental monitoring, and strengthen the smart-farming capacities, competitiveness and fair income by introducing an innovative, intelligent and multi-technology, fully distributed platform of platforms. To achieve technological maturity and massive acceptance, AgriDataSpace adopts and adapts a

multidimensional approach that combines state of the art big data and data-spaces' technologies (BDVA/IDSA/GAIA-X) with agricultural knowledge, new business models and agri-environment policies, leverages on existing platforms and edge computing, and introduces novel concepts, methods, tools, pilots and engagement campaigns to go beyond today's state of the art, perform breakthrough research and create sustainable innovation in upscaling (real-time) sensor data, already evident within the project lifetime.

AgriDataValue will be validated via 24 Use cases in 23 pilots in 9 countries, representing more than 181,000ha with 25 types of crops that span from southwest to northeast Europe, outdoor and greenhouse crops, organic and non-organic production, and more than 2,000 animals of 5 types. More than 4,200 farmers will provide insights and more than 89,000 will be directly informed. More than 1,600 sensors will be utilised, and more than 4,500 additional sensors will be installed to measure (real-time) data, including more than 2,500 RFID tags.

4Growth aims to create synergies with AgriDataValue project and its extensive network, which includes (i) farmers, (ii) agronomists, (iii) researchers, (iv) suppliers, (v) citizens & civil society, (vi) governments and stakeholders, (vii) CAP paying authorities, and public organisations, (viii) urban authorities & municipalities, (ix) regulatory bodies.

This synergy building will be facilitated through the active involvement of 4Growth's partner EV ILVO that is also participating in AgriDataValue's consortium.

- **CODECS:** The ongoing Horizon Europe project aims to improve the motivation and the capacity of European farmers to understand and adopt digitalisation as an enabler of sustainable and transformative change.

It brings together 33 partners all around Europe, including 4Growth partners EV ILVO, AUA and WR.

- **D4AgEcol:** The ongoing Horizon Europe project aims to show the potentials of digitalisation as enabler for agroecological farming systems in Europe based on available knowledge and actors' and stakeholders' co-innovation capacity. Partners from seven countries across a wide spectrum of pedoclimatic zones in Europe will assemble a holistic evaluation of digital tools and technologies. This will be based on indicators for agroecology, economic considerations and investigations about perceived benefits for user and stakeholder. Drivers, barriers and risks of digital technologies for a transformation towards agroecology will be identified. The results of this analysis will feed in national and European roadmaps for agroecology, indicating the need for adjusted policies and a technology research and innovation agenda.

4Growth's partner AUA is actively participating in D4AgEcol consortium.

- **Data4Food2030:** The ongoing Horizon Europe project aims to improve the data economy for food systems by expanding its definition, mapping its development, performance and impact to create new insights and opportunities.

It brings together 24 partners from 12 countries, including 4Growth partners EV ILVO, FSH and WR.

- **DigitAF:** The ongoing Horizon Europe project aims to:
  - Support policy actors at regional, national and European level in order to design more efficient and effective policies to support agroforestry adoption and monitor their impact on biodiversity, climate change mitigation and agricultural sustainability
  - Support farmers in designing and managing agroforestry systems in order to optimise agronomic, economic, social and environmental performances



- Allow actors in agroforestry value chains in order to verify and market benefits, including enhanced biodiversity, carbon sequestration, soil health. DigitAF also supports consumers looking for food of high nutritional quality and farmed respecting the environment
- Overcome socio-technical barriers to a widespread implementation of agroforestry by setting up six Living Labs across the EU
- Provide researchers and software developers with FAIR (findable, accessible, interoperable and reusable) open platforms in order to encourage data sharing and software interoperability and foster open science practices
- Convince decision-makers that agroforestry is a concrete solution to improve agricultural sustainability and resilience to climate change.

Part of DigitAF's work is the collection of data and evidence to support policy and decision makers for the implementation of agroforestry systems, improving the communication and boosting networking to reach different targets and the implementation of tailored multi-actor approach directly engaging with stakeholders whose decision impact the spread of agroforestry practices.

The project consortium consists of 26 European and international partners, including 4Growth partner EV ILVO.

- **EU-FarmBook:** The ongoing Horizon Europe project aims to further develop the digital platform of an online, open-source, European knowledge reservoir about agriculture and forestry practical solutions, which was developed by the EU projects EURAKNOS and EUREKA. The overall aim is for the platform to stimulate knowledge exchange, user interaction and collaboration, ultimately resulting in innovation for environmentally, socially and economically sustainable agriculture and forestry.

EU-FarmBook consortium consist of 29 partners from 18 countries, including 4Growth partner AUA.

- **FARMTOPIA:** The ongoing Horizon Europe project aims to democratise digital farming by creating a paradigm shift in the way Agricultural Digital Technologies (ADSs) for small farms are created, deployed and paid for. This will be achieved by a) fostering co-creation of ADSs to ensure they will solve real problems and fit the needs of small farms; and b) lowering the cost for both farmers and ADSs providers, by creating a set of reusable software modules, a number of business and governance models, and identifying public provision of infrastructure that can enable scale-out of ADSs.

Using a multi-actor approach, FARMTOPIA will engage farmers, ADSs providers, farm advisors, scientists, policy makers, AKIS actors and other relevant stakeholders in 18 Sustainable Innovation Pilots (SIPs) in at least 15 countries across Europe, and guide them in co-creating, deploying and piloting innovative ADSs while designing, adapting and validating appropriate business and governance models to support them (such as the French CUMA model, which is embraced by >225.000 farmers).

FARMTOPIA consists of 22 partners from 12 countries, including 4Growth partners FSH, LITH and AUA.

- **FoodDataQuest:** The ongoing Horizon project aims to improve the overall sustainability of agri-food system through data sharing and data compatibility across sectors to address social, health, nutritional and environmental issues that challenge the sector. By bridging gaps in data flow, stakeholders will gain data-driven insights to make better, more sustainable and informed decision-making. This should also enhance transparency in and efficiency throughout the supply chain, reduce waste, and promote ethical practices.

FoodDataQuest consortium consists of 15 partners from 8 countries, including EV ILVO, FSH and WR.

- **OpenAgri:** The ongoing Horizon Europe project aims to democratise digital farming by enabling the development and deployment of innovative cost-effective energy-efficient OS software and open hardware-based ADSs that can operate at a high performance even in remote areas with weak connectivity. This will be achieved by a) ensuring the co-creation of ADSs by engaging farmers and farm advisors in participatory prototyping activities inspired by the makerspaces approach; and b) providing access to a number of reusable OS software services designed to support the edge and mixed computing mode, and a “sociotechnical infrastructure”.

Using a multi-actor approach, OpenAgri will involve farmers, ADSs providers, farm advisors and scientists in 14 Sustainable Innovation Pilots (SIPs) in ≥10 countries across Europe, and guide them in co-creating and piloting edge, cloud and mixed-model ADSs addressing important challenges of agricultural production. 5 SIPs have been pre-selected and 9 more will be awarded through an Open Call, enabling a dynamic response to a changing policy and technology landscape. Finally, building on a thorough analysis of EU agriculture and the results from the SIPs, OpenAgri will create a Decision Support Tool that will allow Policy Makers, Farmers and Farm Advisors to select the best possible cloud, edge or mixed ADSs for any given set of conditions.

OpenAgri consortium consists of 18 partners from 7 countries including 4Growth partners AUA, EV ILVO and FSH.

- **PATH2DEA:** The ongoing Horizon Europe project aims to unlocking digitalisation’s catalysing power to foster European agriculture’s transition towards enhanced sustainability. It will build on farmers’ competences and views and match them with the rich repertoire of digital solutions already available for agriculture, aimed at tailoring digital technologies to users’ needs and fostering wide-range adoption of digital agroecological farming in the EU and associated countries. Strategic engagement by multiple actors includes early adopters of digital agroecological farming represented by six Showcase farms located in different pedo-climatic regions, with hands-on experience for solid consensus validation of the project’s conclusions.

PATH2DEA will deliver a robust knowledge base in the frame of an Open-Source Repository of digital tools and technologies in agroecology with decision support functionalities and a well-aligned R&I Roadmap for guiding digital agroecology transition. Finally, PATH2DEA will use its results for bridging towards the upcoming European Agroecology Partnership.

PATH2DEA consortium consists of 18 partners from and 9 EU countries, including 4Growth partner WR.

- **PHITO Platform:** The ongoing Horizon Europe project aims to empower farmers with digital agriculture, through the development of a platform to provide SMFs with the means to incorporate digital technology. Specifically, the platform connects SMFs with valuable resources, such as free soil, water and crop advice. This not only fosters collaboration among farmers but also strengthens local agricultural knowledge and innovation systems. PHITO’s approach to digital farming is innovative, as it leverages open geo-databases and seamlessly integrates them into local food systems.

The overarching goal of the project is to enhance SMFs’ decision-making processes and improve their economic and environmental performance.

PHITO Platform consortium consists of 17 partners all over Europe, including 4Growth partner WR.

- **ScaleAGData:** The ongoing Horizon Europe project aims to obtain insights in how the complex data streams should be governed and organised, as well as to develop the data technology (from data streaming, data analytics and AI (Artificial Intelligence) applications) needed to scale data collected at the farm level to regional datasets built for agri-environmental monitoring and the management of agricultural production.

ScaleAGData consortium consists of 17 partners all over Europe, including 4Growth partner EV ILVO.

- **Smart Droplets:** The ongoing Horizon Europe project aims to accelerate the achievement of EU Green Deal Goals for pesticide and fertilizer reduction through AI, data, and robotic technologies.

Smart Droplets consortium covers all agricultural AI, data and robotics value chain actors, and is well balanced in terms of expertise, entity type, and geographical distribution necessary to meet its objectives. Smart Droplets will demonstrate how autonomous robotic platforms, innovative spraying, digital twin and AI models, can deliver environmental, economic, regulatory, business, scientific, and societal benefits, assisting in the achievement of Green Deal goals.

Smart Droplets consortium consists of 9 partners from 7 countries, including AUA, FSH, WR and LITH.

- **SPADE:** The ongoing Horizon Europe project aims to develop an intelligent ecosystem to address the multiple purposes concept in the light of deploying unmanned aerial vehicles (UAVs alias drones) to promote sustainable digital services for the benefit of a large scope of end users in sectors of crop production, forestry, and livestock. This includes individual UAV usability, UAV type applicability (e.g., swarm, collaborative, autonomous, tethered), UAV governance models availability and UAV-generated data trustworthiness. Multi-purposes will be further determined in the sensing dataspace reusability based on trained Artificial Intelligence (AI)/Machine Learning (ML) models. These models will enable sustainability and resilience of the overall life cycle of developing, setting up, offering, providing, testing, validating, refining as well as enhancing digital transformations and “innovation building” services in agriculture. Pilot prototypes will contribute toward greater goals, such as the reduction of deforestation, precision farming and animal welfare.

Spade consortium consists of 21 partners from 10 countries, including 4Growth partner AUTH.

An aggregate list of these EU initiatives can be also found on [Annex C](#).

## 2.3 Other relevant initiatives

### 2.3.1 Synergy Days 2024

The Synergy Days is the most important conference connecting the digital innovators of the European agri-food sector.

Building onto the legacy of the [SmartAgriHubs](#) Horizon2020 project, coordinated by 4Growth’s coordinator WR, for 3 years in a row, the event aims to create a network of EU projects, policymakers, DIHs, agri-food operators and more, to boost the adoption of digital solutions by the agriculture sectors, through meetings, debates, and knowledge exchange. 4Growth will actively participate in the 2024 version of Synergy Days, scheduled to take place on 14-15 October 2024, in Barcelona, Spain.

4Growth will provide a 3-minute pitch presentation during the conference's plenary session, aiming to briefly describe the project's goals, mission, and core aspects to the diverse audience of the conference. During the Synergy Days, the project will also have its own exhibition booth, where all attendees can have a visual overview of the project's key concepts. The project's participation in

Synergy Days 2024 provides an excellent opportunity to create multiple synergies and collaboration opportunities and, even on practical terms, assist towards the dissemination of 4Growth's Digital Agriculture & Forestry Uptake Assessment Grid to other projects' partners and networks as well as towards the collection of data that is relevant to 4Growth's scope.

## 2.3.2 Other activities

During the duration of the project, 4Growth partners will monitor, identify and participate in other relevant initiatives and network activities. By the time of the official submission of this deliverable (M4 – April 2024), project partners have mapped the following activities that have the potential to serve as an opportunity for establishing networks and building synergies:

- The 7<sup>th</sup> European Agroforestry Conference – EURAF 2024 Congress that is taking place on 27-31 May 2024 in Brno, Czechia.
- The FORECOMON 2024 - 11<sup>th</sup> Forest Ecosystem Monitoring Conference that is taking place on 10-12 June 2024 in Prague, Czechia.
- The 4<sup>th</sup> Global Conference on Agriculture that is taking place on 21-23 June 2024 in Vienna, Austria.
- The International Union of Forest Research Organisations (IUFRO) World Congress 2024 is taking place on 23-29 June 2024 in Stockholm, Sweden.
- The European Forest Institute (EFI) 2024 Annual Conference is taking place on 18-20 September 2024 in Bonn, Germany.
- The Central Agricultural Trade Fair 2024 is taking place on 6-8 December 2024 in Warsaw, Poland.
- The EU Agri-Food Days 2024 is taking place in December 2024 in Brussels, Belgium (exact dates to be announced).

## 2.4 4Growth Observatories

One of the core elements of the 4Growth approach is the collection of “ground truth” data via distributed observatories to inform the MMFT with rich insights into the uptake and utilisation of digital technologies at the micro scale. Using the Digital Agriculture & Forestry Uptake Grid developed in T2.2 to obtain a consistent and unbiased report that covers all topics of interest, 4Growth will gather and analyse data via 8 observatories across Europe. The data gathered will investigate several parameters, including how respondents have adopted/used digital technologies, where and how they use them, what benefits they experience, what barriers there are to uptake etc. Through their already well-established positioning in the European agriculture and forestry sectors, each observatory partner (WR, AUA, ILVO, LITH, VTT, AUTH, CTIFL, INTIA) will cultivate their own networks, known as the “4Growth observatory ecosystem”, to establish and tap into rich sources of data stemming from the likes of agricultural/forestry associations, cooperatives, data coalitions, R&I bodies etc. Each of these entities in turn will have hundreds of sub-sets of potential data points (i.e., individual farmers, foresters, consultants, researchers, collaborators), meaning the vast network established by the 4Growth observatories will easily have access to thousands of sources of data points. A list of 4Growth's observatory partners can be found on [Annex D](#).

An indicative list of the entities that each 4Growth observatory partner has within their current ecosystem is provided below, in table 3.

**Table 3:** 4Growth observatory partners' ecosystem

Name	Type	Country	Relationship to 4Growth Observatory Partner
<a href="#">AgriDataCube</a>	Hub	Netherlands	WR – host of the hub
<a href="#">SmartAgriHub</a>	Network	Netherlands	WR – coordinator of the hub
<a href="#">NPPL</a>	Ecosystem	Netherlands	WR – coordinator of the ecosystem
<a href="#">Dutch Blockchain Coalition</a>	Association	Netherlands	WR – strong contact with the association
<a href="#">Farm Accountancy Data Network</a>	Network	Netherlands	WR - member of the network
<a href="#">Ministry of Agriculture, Nature and Food Quality</a>	Ministry	Netherlands	WR - has strong professional contacts
<a href="#">Robagri</a>	Association	France	CTIFL - Member of the association
<a href="#">UMT ECOTECH</a>	Network	France	CTIFL - has strong professional contacts
<a href="#">FNPF   Légumes de France</a>	Associations	France	CTIFL – contribute to CTIFL research
<a href="#">Réseau DEPHY</a>	Network	France	CTIFL – lead of DEPHY vegetable network
<a href="#">Pegasus</a>	Cooperative	Greece	AUA - Projects: <a href="#">ROBS4CROPS</a> , <a href="#">SMATAKIS</a>
<a href="#">Nileas</a>	Cooperative	Greece	AUA - SUPPORT (Horizon) <a href="#">IOF2020</a>
<a href="#">ELGO-DIMITRA</a>	Research Inst.	Greece	AUA - National Projects: <a href="#">DiVine</a>
<a href="#">SEEDForest</a>	Network	Finland	VTT - Network is established and lead by VTT
<a href="#">FinnCERES</a>	Ecosystem	Finland	VTT - The ecosystem is coordinated by VTT
<a href="#">Finnish Forest Industries   Finnish Forest Association</a>	Association	Finland	VTT - has strong professional contacts
<a href="#">FTP</a>	Ecosystem	Europe	VTT - has strong professional contacts
<a href="#">Ministry of Agriculture and Forestry of Finland</a>	Ministry	Finland	VTT - has strong professional contacts
<a href="#">International Association for Mediterranean Forests (AIFM)</a>	Association	Mediterranean	AUTH - Members of AUTH's <a href="#">FMRS laboratory</a>

<a href="#">EARSeL</a>	Network	Europe	AUTH - FMRS laboratory is a member
<a href="#">European Forest Institute (EFI) / EFI's Mediterranean Facility</a>	Research Inst.	Mediterranean	AUTH - FMRS laboratory has collaborated with EFI in several European projects.
<a href="#">MedRIN</a>	Network	Mediterranean	AUTH - Members of AUTH's <a href="#">FMRS laboratory</a>
<a href="#">INRAE</a>	Research Inst.	France	AUTH - AUTH has liaison with units of INRAE
<a href="#">General Directorate of Forests and Forest Environment</a>	Policy maker	Greece	AUTH - FMRS laboratory is a permanent collaborator with the Greek Central Forest Service
<a href="#">DjustConnect</a>	Public org.	BE, NL, FR	ILVO - is part of the steering board/hosts platform
<a href="#">Wallonia Digital Farming   Smart Digital Farming</a>	Public org.	Belgium	ILVO - Close cooperation with the CC ILVO
<a href="#">Boerenbond</a>	Non-profit	Belgium	ILVO - part of an ILVO project
<a href="#">Agoria</a>	Non-profit	Belgium	ILVO - Close corporation in projects and advisory
<a href="#">Agribusiness club</a>	Non-profit	Belgium	ILVO - Networking partner for Business project
<a href="#">Experimental Poultry Center</a>	Research Inst.	Belgium	ILVO - Direct contact with farmers
<a href="#">Cooperativa Cerealista Valdorba</a>	Cooperative	Spain	INTIA - belong to the INTIA advisory network
<a href="#">AFNA</a>	Association	Spain	INTIA - belongs to the INTIA's Consultive Advice
<a href="#">DIH IRIS</a>	Hub	Spain	INTIA - participates as research centre
<a href="#">Protected geographical indications</a>	Initiative	Spain	INTIA - carries out controls/inspection for PGIs
<a href="#">LITMEA</a>	Association	Lithuania	LITH – Close collaboration between clusters
<a href="#">National Paying Agency</a>	Public org.	Lithuania	LITH - Collaboration on project BEATLES
<a href="#">Innoskart Cluster</a>	Cluster	Hungary	LITH - Collaboration on the SUAVE Eurocluster
<a href="#">HPC4Poland EDIH</a>	Hub	Poland	LITH – Close collaboration between clusters



<a href="#">Smart Food Cluster</a>	Cluster	Lithuania	LITH – Close collaboration between clusters
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The list above is not final and additional information will be added throughout the duration of the project. Even at this early stage of the project implementation, the true size of the 4Growth observatory ecosystem is much greater with many more associations/networks/clusters working in close collaboration with 4Growth partners.

After synthesising the data and information gathered, findings/best practices will be fed back into the observatories and underlying networks so that stakeholders, farmers, foresters etc. can use this to adapt their practices and strategies. In this way, a co-creation process and information exchange paradigm between the 4Growth project and the observatory ecosystems will be established through which the 4Growth project will gradually develop “living labs” across Europe.

The observatory ecosystem will be structured and then data will be gathered in three distinct “investigation waves”, lasting 9 months each, to capture changes in data over time, avoid missing recent developments and ensure incorporation of lessons learned in an iterative process. Each wave has three stages: 1-month preparation, 6-months data collection and a 2-months data analysis.

## Conclusion and next steps

D4.4 “Synergy Building with other European Initiatives – Draft 1” has provided an overview of the strategy and specific steps and actions during the whole project lifetime. The intention of this document is to first outline the initial plan for building transdisciplinary links and synergies among stakeholders, networks as well as other projects and initiatives relevant to 4Growth, and provide a roadmap for nurturing an open, expanding and sustainable ecosystem on digital technologies in agriculture and forestry in order to enhance knowledge exchange. The second function is to present a list of related EU and national projects and activities from consortium partners as well as a list of other relevant EU initiatives that have been identified by project partners in this first four months of the project implementation.

This is the first official deliverable to be submitted to the European Commission in M4 (April 2024). The upcoming official versions, scheduled for submission in M12 (Draft 2), M21 (Draft 3) and M30 (final), will build upon the work done in this document, evaluate the progress of the synergy building strategy, identify weaknesses and strengths, and bring forward corrective actions where necessary.

Based on the timeline and the phases described in section 2.1 of this document, in the months to come and especially until the end of 2024 when D4.5 – Synergy Building with other European initiatives – Draft 2 will be officially submitted, 4Growth will simultaneously work on different levels and processes. Having already completed a first round of identification and mapping of EU initiatives, the Project Management Team, with the contribution of project partners will evaluate and rank the results based on what needs to be achieved in this first year of the project implementation.

Once these steps are concluded, 4Growth will set up a contact strategy for each of the project and/or initiative that will have been qualified for synergy building. Emphasis will be given to build synergies with initiatives that have the potential to further disseminate 4Growth’s data collection tools as well as to initiatives that can provide data and information relevant to 4Growth’s scope.

Another round of mapping and identification will take place before the submission of D4.5, extending the list of potential synergies, which in turn will be followed by another evaluation phase.

Therefore, the submission of the second draft of this document will include more information regarding the practical implementation and progress of the methodology and strategy described in detail in this deliverable. It will also provide a step-by-step approach regarding the action phase, which will start together with 4Growth’s second year of implementation, as mentioned in the indicative timetable included in this document.



# ANNEX

## Annex A: Synergy mapping template for project partners

4GROWTH synergies and liaison mapping						
#	Type of Initiative	Full Name	Website	Initiative Leader	Focus Area	Potential Joint Activities
1						
2						
3						
4						
5						
6						
7						
8						

## Annex B: Related EU and national projects and activities from consortium partners

Related EU and national projects and activities from consortium partners			
#	Title	4Growth partner involved	Link to 4Growth
1	Smart-AKIS	AUA, WR, INTIA	Extensive smart farming agriculture market and scientific article research, incl. several technologies/subsectors. Experience in gathering and handling data related to smart farming.
2	SmartAgriHubs	WR, AUA	Extensive experience in innovation/market analysis, development and sustaining of impactful, far-reaching initiatives in agri-tech.
3	FAIRSHARE	AUA, ILVO, INTIA, WR	Experience in data collection, analysis and the development of good practices to facilitate uptake of innovative agri-tools.
4	QuantiFarm	FSH	Experience of applying a comprehensive and independent assessment of costs, benefits, and sustainability gains (economic, environmental, social) under real-life conditions.
5	Robots4Crops	FSH	Experience in analysing impacts of digital technologies in agriculture.
6	ICAERUS	FSH, LITH	Experience in exploring new effects of new technologies in agriculture.
7	GSA MKD Lot 1	EVF, LEE	Direct exposure to digital agriculture and forestry as GNSS and EO-based solutions are included in the market monitoring and forecasting model with global coverage.
8	CYBELE	EVF, ILVO, WR	Extensive precision agriculture market research, spanning several technologies and subsectors (most notably HPC-enabled); Experience in innovation management and

			exploitation planning for cutting-edge digital agriculture technologies.
9	Portfolio of data visualisation platforms	VIZ	<ul style="list-style-type: none"> <li>• Forest Forward – Predicts distribution of commercially important tree species</li> <li>• LandGriffon - measurement &amp; management agricultural supply chain impacts.</li> <li>• TRASE - flow of global food commodities with focus on environmental impacts</li> <li>• Global Forest Watch (GFW) near real-time info about changes in our forests</li> <li>• ReFED Insights is a data and solutions hub for food waste reduction</li> <li>• Soils Revealed visualising changes of soil organic carbon stocks globally.</li> <li>• Climate Watch open climate data, visualisations on the global progress of climate change.</li> </ul>
10	Portfolio of relevant foresight studies	FI	<ul style="list-style-type: none"> <li>• “Future of Crop Protection in Europe” - study for the European Parliamentary Research Service, Scientific Foresight Unit (STOA)</li> <li>• “Precision agriculture and the future of farming in Europe” - scientific foresight study for the Directorate-General for Parliamentary research Services (European Parliament)</li> </ul>
11	Forestry-TEP platform	VTT	Forestry remote sensing expertise. Data platform management expertise.
12	EU AgroBRIDGES	VTT, WR	Expertise and results to be used in Agriculture sector of the project.
13	EU BIGPROD	VTT	Expertise in technology foresight. Methods to be used in data collections and analysis.
14	NOF – National Observatory of Forests	AUTH	Experience in forestry technology foresight. Methods to be used in data collections and analysis.
15	ICT-agri-food	ILVO	ILVO are responsible for network development and management within this project.
16	MISPA	CTIFL	Experience in evaluating impacts of cutting-edge agriculture innovations.

## Annex C: Identified related EU and national projects and activities from consortium partners

Identified related EU and national projects and activities from consortium partners			
#	Project Name	4Growth partner involved	Website
1	AgriDataValue	EV ILVO	<a href="https://agridatavalue.eu/">https://agridatavalue.eu/</a>
2	CODECS	EV ILVO, AUA and WR	<a href="https://www.horizoncodecs.eu/">https://www.horizoncodecs.eu/</a>
3	D4AgEcol	AUA	<a href="https://d4agecol.eu/">https://d4agecol.eu/</a>
4	Data4Food2030	FSH, EV ILVO, WR	<a href="https://data4food2030.eu/">https://data4food2030.eu/</a>

5	DigitAF	EV ILVO	<a href="https://digitaf.eu/">https://digitaf.eu/</a>
6	EU-FarmBook	AUA	<a href="https://eufarmbook.eu/en">https://eufarmbook.eu/en</a>
7	FARMTOPIA	FSH, LITH and AUA	<a href="https://farmtopia.eu/">https://farmtopia.eu/</a>
8	FoodDataQuest	EV ILVO, FSH, WR	<a href="https://fooddataquest.eu/">https://fooddataquest.eu/</a>
9	OpenAgri	AUA, EV ILVO and FSH	<a href="https://horizon-openagri.eu/">https://horizon-openagri.eu/</a>
10	PATH2DEA	WR	<a href="https://www.path2dea.eu/index.html">https://www.path2dea.eu/index.html</a>
11	PHITO Platform	WR	<a href="https://phito.eu/">https://phito.eu/</a>
12	ScaleAGData	EV ILVO	<a href="https://scaleagdata.eu/en">https://scaleagdata.eu/en</a>
13	Smart Droplets	AUA, FSH, WR and LITH	<a href="https://smartdroplets.eu/">https://smartdroplets.eu/</a>
14	SPADE	AUTH	<a href="https://spade-horizon.eu/">https://spade-horizon.eu/</a>

## ANNEX D: List of 4Growth's observatory partners

Observatories	Region	Partner
<b>Agriculture Observatories</b>	Spain	INTIA
	France	CTIFL
	Benelux region	ILVO and WR
	Greece/Balkan region	AUA
	Lithuania/Poland/Hungary	LITH
<b>Forestry Observatories</b>	Finland/Northern Europe	VTT
	Greece/Southern Europe	AUTH