



TRansition paths to sUustainable
legume-based systems in Europe

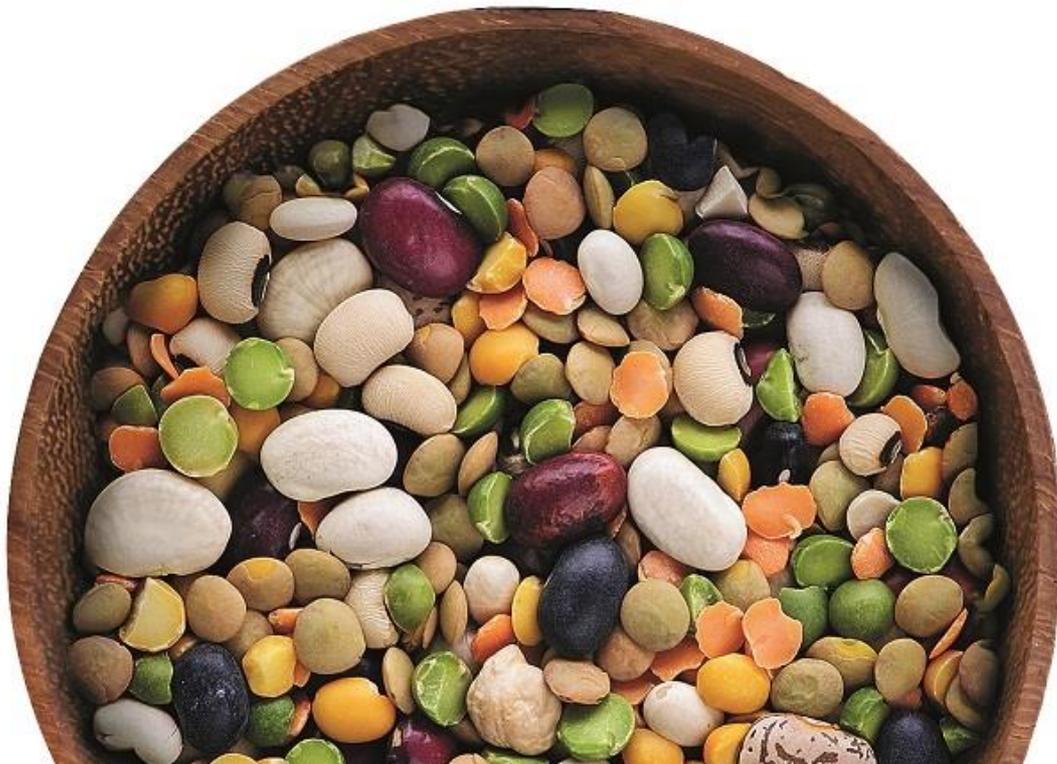
TRUE Annual Activity Plan, Year 4

Work Package: 9

Deliverable (D): 9.6 (D54)

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Deliverable Description & Contributors

- Due date: 30th April 2020
 - Actual submission date: 30th April 2020
 - Project start date: 1st April 2017
 - Duration: 48 months
 - Work Package (WP): Coordination (WP9)
 - WP Leader: Pietro P.M. Iannetta (JHI)
 - Deliverable Title: TRUE Annual Activity Plan, Year 4
 - Nature of Deliverable: Report
 - Dissemination level: PU, Public
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- **Deliverable description:** This plan will formalise specific operations (meetings and agendas), at WP and sub-WP level for the following 12 months. The output will be formalised *via* the project workspace (SharePoint) and associated project management software. The plan will identify and facilitate the necessary Coordination to help ensure the timely delivery and success of linked project activities and meetings or workshops. This plan will also help inform the framework of the DMP (D9.2).
-
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- **Key words**
 - Activity Plan; Deliverables; Legume Innovation Network; General Assembly; Periodic Review.





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1. Year 4 Deliverables

Table 1. List of Deliverables scheduled to be submitted during Year 4 of the project.

N°.	N°. in Work Package	Title	Lead Beneficiary	Type	Dissemination Level	Original Estimated Delivery Date (project month)
D54	D9.6	Annual activity plan - Year IV	JHI	Report	Public	37
D57	D9.9	Project Review, Impact and Legacy Plan - Report I	JHI	Report	Public	37
D20	D3.3	Two scientific publications	UCP	Report	Public	40
D15	D2.5	Submit DMP, database populated - update for Year VI	AUA	Report	Confidential	42
D17	D2.7	E-book on the Systematic Review	AUA	Report	Public	42
D8	D1.8	Recipes for legume dishes in Europe	SF	Report	Public	45
D21	D3.4	Best practice guide on legume processing and inclusion	AWI	Report	Public	46
D22	D3.5	Innovation Catalogue	AWI	Report	Public	46
D32	D5.4	Consequential LCA summary	BU	Report	Public	46
D2	D1.2	Establish founding group of Pulse Europe	PGRO	Other	Public	48
D7	D1.7	Scientific, practice and policy publications - Year IV	UHOH	Report	Public	48
D10	D1.10	Practice Abstracts II	UHOH	Report	Public	48
D16	D2.6	Data to institutional repository (ORDP)	AUA	ORDP	Public	48
D35	D5.7	Environment and nutri-economic assessments of European diets – Report I update	TCD	Report	Public	48





N°.	N°. in Work Package	Title	Lead Beneficiary	Type	Dissemination Level	Original Estimated Delivery Date (project month)
D39	D6.4	Scenarios for upscaling production, including economic and trade indicators – Report I Update	SRUC	Report	Public	48
D43	D7.4	Policy papers/briefs and recommendations	ESSRG	Report	Public	48
D46	D8.3	Modelling sustainable (legume) systems	JSI	Demonstration	Confidential	48
D47	D8.4	Web-based tool for legume systems	JSI	Other	Public	48
D48	D8.5	Scientific and technical manuals/publications for web tool	JSI	Report	Public	48
D55	D9.7	Updated Risk Log and Review Report	JHI	Report	Public	48
D58	D9.10	Project Review, Impact and Legacy Plan - Report I update	JHI	Report	Public	48

* For new estimated delivery dates, see Table 2





Table 2. Deliverables Gantt chart where green bar endpoints denote the end of month deadline for submission of Deliverables.

Year	2020											2021		
	Month	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	
Project month	37	38	39	40	41	42	43	44	45	46	47	48		
Deliverables														
D54. Annual activity plan - Year IV	[Green bar from Apr. to May]													
D57. Project Review, Impact and Legacy Plan - Report I	[Green bar from Apr. to May]													
D20. Two scientific publications	[Green bar from Apr. to Aug.]													
D15. Submit DMP, database populated - update for Year VI	[Green bar from Apr. to Sep.]													
D17. E-book on the Systematic Review	[Green bar from Apr. to Oct.]													
D8. Recipes for legume dishes in Europe	[Green bar from Apr. to Dec.]													
D21. Best practice guide on legume processing and inclusion	[Green bar from Apr. to Jan.]													
D22. Innovation Catalogue	[Green bar from Apr. to Jan.]													
D32. Consequential LCA summary	[Green bar from Apr. to Jan.]													
D2. Establish founding group of Pulse Europe	[Green bar from Apr. to Mar.]													
D7. Scientific, practice and policy publications - Year IV	[Green bar from Apr. to Mar.]													
D10. Practice Abstracts II	[Green bar from Apr. to Mar.]													
D16. Data to institutional repository (ORDP)	[Green bar from Apr. to Mar.]													





Year	2020										2021		
Month	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	
Project month	37	38	39	40	41	42	43	44	45	46	47	48	
Deliverables													
D35. Environment and nutri-economic assessments of European diets – Report I update													
D39. Scenarios for upscaling production, including economic and trade indicators – Report I Update													
D43. Policy papers/briefs and recommendations													
D46. Modelling sustainable (legume) systems													
D47. Web-based tool for legume systems													
D48. Scientific and technical manuals/publications for web tool													
D55. Updated Risk Log and Review Report													
D58. Project Review, Impact and Legacy Plan - Report I update													





Annual Activity Plan – Year IV (D54/D9.6, JHI)

Reported here in this document.

Project Review, Impact and Legacy Plan - Report I (D57/D9.9, JHI)

Project Legacy Plan – Version I. Will establish the first draft to formally detail how the various products developed from TRUEs activities will be managed and co-ordinated to ensure project impact legacy beyond the funded project term. This will be informed by the Impact Plan (D56/D9.8), to an extent. However, the specific focus here is towards scoping the role of TRUEs insights and products in future initiatives, such as EIP (European Innovation Partnerships) and FOCUS-groups. As well as other applications to help support the European Commission’s policy agenda for research and sustainable development.

Two scientific publications (D20/D3.3, UCP)

Two publications published in scientific journals after peer-review. These will report on a set of novel food and beverage products, tested and validated for optimal sensory performance and commercial efficacy. The sensory analysis will be conducted through the Regional Clusters to ensure a maximum range of consumer types.





Submit DMP, database populated - update for Year VI (D15/D2.5, AUA)

From month 6, and annually thereafter for years 2 and 3, a Data Management Plan (DMP) will be drafted to ensure the capture of all data set types and in forms that ensure explanatory metadata is captured to ensure long-term utility of the information gathered. The data will encompass a library of Standard Operating Procedures (SOPs) for key techniques and includes historical datasets and other databases as appropriate, including other projects - Legume Futures, LegSA, Eurolegume, Legato and Protein2Food. Data acquisition extends to the provision of published outputs, be they meeting abstracts, data highlights and key findings including images and video shorts etc. The year 4 DMP will fully establish the TRUE project 'data-legacy handling' strategy which will extend beyond the life of the project.

E-book on the Systematic Review (D17/D2.7, AUA)

An E-book entitled, 'Transitioning to Sustainable Food Systems: the role of society in integrating and balancing profit and nutrition'. This will be developed from a scientific manuscript formed from a systematic review of common bean, and which is also intended for publication after peer-review. It is anticipated that experts involved in the Systematic Review will also play a key role in informing the trials being conducted in years 2 and 3, and for development of the various Decision Support Tools (WPs 5 and 8).





Recipes for legume dishes in Europe (D8/D1.8, SF)

Publication and dissemination of a set of legume-centred recipes, entitled ‘TRUE Foodprint: legume recipes to encourage sustainable food systems’. This will be developed based on common and region-specific underutilised, rare and endangered legumes. Data associated with each dish will capture cultural and historical aspects. Slow Food Germany e.V. will lead dissemination activities regarding the book at key European events such as: the ‘Biofach’ fair (Nürnberg, Germany); the ‘Slow Food Exhibition’ (Stuttgart, Germany); and the Terra Madre/Salone del Gusto (Turin, Italy) to officially launch dissemination of the recipe book. EUREST will also distribute the recipe books in their service units across Europe.

Best practice guide on legume processing and inclusion (D21/D3.4, AWI)

Publication of the ‘best practice guide on legume processing and inclusion for fish and poultry feeds’. This will be based upon the five major feeds which are to be recommended to European animal feed producers based on feeding trials that balance key-nutritional and –bioactive contents. The guide will also be applicable across the various pedoclimatic regions of the EU.

Innovation Catalogue (D22/D3.5, AWI)

Two publications: Firstly, “The Legume Innovation Catalogue”. Secondly, an ‘information brochure’ provisionally titled here, “Legume-based dietary options for better personal and environmental wellbeing”. In the former, information presented will build upon an, ‘innovation monitoring system’, captured with the Data Management Plan (WP2) and innovations captured for market-oriented work in WP4 (Task 4.3). Thus, this output will utilise the activities of WP1 and 2, plus the systematic review - to capture knowledge and innovations to develop and produce new legume-based processes, products, business models and types of ‘Innovation Network’. The information brochure will be extracted and abridged from the Innovation Catalogue to address, in lay-terms, legume-based innovations for better environmental as well as personal well-being.





Consequential LCA summary (D32/D5.4, BU)

Report summarising the results of the consequential life cycle analysis – this is to be presented in Regional Cluster meetings. This synthesis will allow an indication of ‘public good’ benefits of legume deployment scenarios (e.g. CO₂e mitigation) in parallel with economic impacts.

Establish founding group of Pulse Europe (D2/D1.2, PGRO)

Through mainly the joint Regional Clusters and their interaction, though also knowledge exchange more broadly, key stakeholders will emerge over the duration of the project to establish the founding memberships of ‘Pulse Europe’. The founding members will be expected to identify a structure, constitution and long-term strategy which will be capable of advancing innovations to promote the efficacy of legumes (not just pulses), beyond the term of TRUE.

Scientific, practice and policy publications - Year IV (D7/D1.7, UHOH)

Annually, data and key outputs/deliverables will be gathered by WP1 and synthesised into practical briefing media such as notes for stakeholders, to inform members of the public of new insight and products via press releases, including trade press. These will be circulated in a range of languages of the Regional Clusters and will also be aimed to policy-makers at regional, national and EU level.





Practice Abstracts II (D10/D1.10, UHOH)

As a requirement of a multi-actor approach, this second milestone for these products aims to deliver the second and final batch of formalised 'Practice Abstracts'. These will be delivered in the EIP common format (as an Excel file) and shall turn innovative knowledge resulting from the project activities into accessible, easy-to-use information for end-users. The practical knowledge will be described in simple terms, to be easily understood by lay-persons and/or specific stakeholders. In total, we estimate conservatively that there will be a minimum total of 36 Practice Abstracts over the course of the project - with final 18 abstracts to be delivered by this end-of-term (month 48) stage.

Data to institutional repository (ORDP) (D16/D2.6, AUA)

All data uploaded annually to the database will be transferred to Zenodo, an open-access data repository.

Environment and nutri-economic assessments of European diets – Report I update (D35/D5.7, TCD)

A scientific paper for publication after peer-review. This will be submitted based upon the findings of the initial stage-1 reports (D5.6), and development thereof. The content of the scientific publication will be summarised for exploitation in a brief to policy makers.





Scenarios for upscaling production, including economic and trade indicators – Report I Update (D39/D6.4, SRUC)

Update to the first stage dataset and report generated in D6.3. This update will develop these outputs by further analyses and iteration of the findings among the TRUE consortium partners; stakeholders engaged through the Regional Cluster networks and other KE (WP1) activities; and, reflection on other data and perspectives informed by collation of information to inform the transition design tools (WP8).

Policy papers/briefs and recommendations (D43/D7.4, ESSRG)

A final policy evaluation report giving, ‘An overview and classification of European and international policies to support legume-based systems’. This key output will also be developed to deliver a minimum of four policy briefs - to help develop positive proactive policies to support the realisation of more sustainable legume-based systems.

Modelling sustainable (legume) systems (D46/D8.3, JSI)

The series of decision models produced in D8.2 will be integrated into a model for the assessment of overall sustainability of legume systems - with respect to the identification of key sustainable legume-based system indicators for the three pillars of sustainability. The decision model will then be used for evaluation of the sustainability relative to the transition pathways to (and even between) more effective scenarios. The approach will assess the complementarity to existing relevant EU policies (e.g. Common Agricultural Policy, Water Framework Directive and climate change objectives, with others such as those for better nutrition and health, and also cultural development).





Web-based tool for legume systems (D47/D8.4, JSI)

A web-based sustainability assessment tool, the “Transition path-finder” (TPF). This will be a user-friendly and practical application designed to meet the needs of various actors involved in the development of a sustainable legume-based farming systems and agri-feed and -food chains. Potential users will span from those connected to the production environment, to consumers and policymakers. The tool shall also be designed to serve the perspectives of users operating at either local, national or EU/global levels. The TPF will also offer the development and impact assessment of new scenarios for improved and innovative legume-based systems.

Scientific and technical manuals/publications for web tool (D48/D8.5, JSI)

Technical and user manuals, and maintenance instructions will be produced to support the TPF (Transition Pathfinder Tool, D8.4). These resources will be delivered by training to users, whose activities will also help validate the TPF. This approach will allow collation of the necessary resources and testing to enable submission of a scientific paper for peer reviewed in an open-access publication.

Updated Risk Log and Review Report (D55/D9.7, JHI)

Risk Log and Review Report (RL-RP). The report will present a formal record of monitoring to complement the Data Management Plan and Annual Activity Plans. The content of this RL-RP will be informed by quarterly reviews of the Executive Committee and the Project Risk Officer. Also, reports on the Quality Control (QC) assessment, reviewed at each Annual Meeting (General Assembly). The RL-RP will also be informed by outputs of specific activities (e.g. Pareto Analysis), to formulate the Risk-Register and Risk-Log outputs. This review will extend to critical analysis of relevant emerging technologies and, other factors which may affect the commercial environment - so the work plan to be adapted accordingly.



Project Review, Impact and Legacy Plan - Report I update (D58/D9.10, JHI)

The final version of the TRUE Project Legacy Plan. This will establish the final version of how the various products developed from TRUEs activities will be managed and co-ordinated to ensure project impact and legacy beyond the funded project term. It will set our activities to realise initiatives, such as EIP (European Innovation Partnerships) and FOCUS-groups, as well as other applications for to help support European Commissions policy agenda for research and sustainable development. It will also capture the opportunities for the non-academic partners and stakeholders connected through TRUE activities to exploit routes for commercialisation of new ideas, products and technologies.

2. Year 4 Milestones

Table 3. The milestone scheduled to be submitted during Year 4 of the TRUE project.

No.	Title	Lead Contributor	Due Date (project month)	Due Date
6	Legume processing methodologies	UCP	40	July 31 st '20
7	Summary report of sensorial analysis and food/feed tests	UCP	40	July 31 st '20
18	Validation: decision support model for legume systems	JSI	46	Jan. 31 st '21
16	Co-Ownership Declarations	ESSRG	48	March 31 st '21
19	Open conference for WP8 results dissemination	JSI	48	March 31 st '21
25	Annual meeting with all partners - Year IV	JHI	48	March 31 st '21





3. Multi-Actor workshop and meetings

There are current restrictions regarding the movement of people and need for social distancing in place across Europe and internationally due to the **COVID-19 pandemic**. In addition, there are uncertainties regarding when and how these restrictions will be relaxed over the coming months. Therefore, and in response to this, an emergency meeting of the TRUE Executive Committee (ECOM) agreed that **the forthcoming Mediterranean-Legume Innovation Network (LIN) workshop, General Assembly and 2nd Periodic Review meetings will be held as remote or electronic ('e') on-line events**. The proposed structures for the eLIN and eGA will be designed to preserve as much as possible the multi-actor and transdisciplinary ethos of the H2020 TRUE Project. Short presentations will be compiled ahead of each meeting so that content can be assimilated, and questions posed, in advance. The content and engagement will be delivered via a networking platform (e.g. 'Zoom', <https://zoom.us/>), to accommodate multi- and transdisciplinary elements via separate break-out groups. Thus, we aim to enable the e-meetings to be as dynamic and interactive as possible. Additional details on these e-meetings are indicated below, and partners will be kept abreast of further news and updates via emails from WP1 (UHOH) and/or WP9 (JHI).

Also, please note that with the expectation of travelling restraints being relaxed throughout Europe by autumn this year, **we are not currently altering the schedule or format of the following and final TRUE events:**

1. the **final Atlantic-LIN** (2-4 Sept. 2020, TEAGASCTEAGACK, Ireland);
2. launch of the **TRUE "Legacy-LIN" and "Policy Dialogue"** - a two-day event to be held in Scotland House (Brussels), in late November/early December 2020; and,
3. the final **TRUE GA Meeting**, scheduled to be held in late January 2021, close to the James Hutton Institute (Dundee, Scotland).



4. European Legume Innovation Networks (ELINs)

Table 4. Details of which partners will host the various ELIN workshops, as well as their locations and approximative dates. The light-green shaded rows denoting ELINs which have already been delivered.

ELIN	Workshop Number	Host Beneficiary	Location	Date
Atlantic	1	PGRO	Peterborough, UK	13-14/12/17
	2	IFAU	Noborg, Denmark	07-08/05/19
	3	Teagasc	Solohead, Ireland	02-04/09/20 ¹
Continental	1	UHOH	Stuttgart, Germany	21-22/11/17
	2	ESSRG & AK	Budapest, Hungary	11-14/09/18
	3	JSI	Ljubljana Slovenia	End Aug '19
Mediterranean	1	AUA	Athens, Greece	20/04/18
	2	UCP	Porto, Portugal	09/07/19
	3	all Mediterranean partners,	Online (technical host: UHOH)	1 July '20 ²
Combined	4	TRUE	Scotland House, Brussels	Nov. 2020 ³

¹ Depending on the COVID-19 restrictions which are in place at that time. It may be that a virtual on-line event will also need arranged for this final Atlantic/Boreal LIN meeting.

² Rescheduled as on on-line event due to the impacts of COVID-19 (see below for further information).

³ This commitment will be monitored since again and depending on COVID-19 social distancing restrictions the delivery of this event may be redesigned with either strict limitation to visitor numbers, delivered on-line or delayed to a suitable period in 2021.





Atlantic ELIN (A-LIN) workshops

3rd A-LIN: Low-carbon and organic legume-based dairy farming (preliminary title)

The focus is currently proposed as ‘**low-carbon and organic legume-based dairy farming**’. It will also incorporate the launches of the Teagasc’s “**sign-post dairy farms**”, a sustainability education/extension service programme and ‘Hedgerow Week 2020’. It was anticipated that over 1000 farmers and industry representatives would attend, including all the main seed companies, at this outdoor event – though this may need revised due the consequences of COVID-19, even if social distancing restrictions are relaxed. Nevertheless, this final regional-LIN is anticipated to encompass a very **strong focus on forage-based legumes and animal (bovine) feeds**. Ongoing discussions will aim to include activities to understand options by which uptake of forage-legume based systems may be extended across Ireland.

Mediterranean ELIN (M-LIN) workshops

3rd M-LIN: “More Legumes – better food systems? Resilience through Agroecology and short supply chains” (preliminary title)

Originally scheduled for May 2020 with the TRUE Partner Freixo do Meio (FdM) hosting of **this LIN will now be realised as an online- or electronic-LIN (e-LIN) on 1st of July (Wednesday) 2020**. The WP1 leaders (University of Hohenheim, UHOH) will kindly act as the e-hosts for this. Voice-to-video (V2V) ‘field trips’ will be prepared by TRUE partners based in the Mediterranean pedoclimatic region. All the TRUE partners in the Mediterranean LIN network will actively contribute and engage other legume-focused stakeholders from their regions. Also, other TRUE partners like the WP-Leaders of the WPs on Markets and Policies are encouraged to be supportive and to get involved too.





Final LIN workshop and launch of the TRUE ‘legacy-LIN’

TRUE is committed to establishing a network of legume-based stakeholders that is at least Europe-wide in its inclusive coverage – though international value is also established via the ISAB, and global relevance of the legumes. This forum is focused to empower more profitable and sustainable legume-based value chains and the original name was to be “Pulse Europe”. However, this name has now been changed to “Legume Innovation Network” (LIN), building upon the similarly named and successful series of workshops already operational within TRUE. This ‘**legacy-LIN**’ initiative is led by PGRO in partnership with UHOH, JHI and the Coordinator of our sister project (Frederic Muel, www.legvalue.eu).

The legacy-LIN will be launched at a two- day event to held at Scotland House (Brussels), though the exact date cannot be identified currently due to uncertainties generated by the COVID crisis. Nevertheless, and assuming that relaxation of social distancing restrictions allow face-to-face meetings, the itinerary is proposed as: day one, a **combined-LIN workshop** that ‘combines’ multi-actors from across all three of the Atlantic, Continental and Mediterranean LINS, and will include the **launch of the Legacy-LIN**; and on day two, a **Policy Dialogue Event** (led by WP7, ESSRG). Further details of this two-day event will be circulated to TRUE stakeholders who have already attended previous LIN workshops and/or have registered via the project website, plus other invited guests.

Legume Innovation Network (LIN) workshop data/reports

Extensive reports detailing discussions and recommendations of the earlier ELIN workshops have been collated and are made available on the TRUE website and TRUE database. At the time of this submission two reports are in the final stages for preparation. These are the Mediterranean workshop in Porto (Portugal), and the Continental workshop in Slovenia (sustainable development indicators). These Open Access reports and resources should feature on the project website (and Zenodo) by the end of May '20.



5. General Assemblies

Table 5. List of General Assembly meetings by project year, with the location, main organiser (host) and dates.

Year	Title	Location	Main Organiser	Date
2017	Kick-off meeting (1st General Assembly)	Edinburgh, UK	JHI	18-21/04/17
2018	2 nd General Assembly	Athens, GR	AUA	16-19/04/18
2019	3 rd General Assembly	Porto, PT	UCP	10-12/07/19
2020	4 th General Assembly	Stuttgart, DE	UHOH	22-25/06/20
2021	Final Meeting & launch of the LIN	Dundee, UK	JHI	01/21 (TBC)

4th General Assembly

Again, and despite the impact of COVID-19 and social-distancing restrictions, the General Assembly (GA) originally scheduled for the week beginning Monday June 22nd 2020 will still take place. However, this will be realised as a two-day electronic GA (or ‘eGA’), over the **23rd - 24th June** only. Also, Thursday the 25th of June will remain set-aside, as originally timetabled, for the 2nd Project Review meeting (see below for further details). As with the remote Mediterranean LIN to be held shortly after the eGA - a wide range of **V2V presentations** will be prepared by the Work Package (WP) and Case Study (CS)-Leaders, and their collaborating project partners. These V2V resources, and a Guideline (‘ReadMe’) document will be placed in a secure central on-line repository two weeks ahead of the eGA event. This two-week ‘**Run-In Period**’ is created to allow the V2V resources to be accessed and assimilated by the eGA delegates in advance of the meeting itself. Also, during the Run-In Period partners should also formally prepare in advance any questions they have on the V2V presentations. These questions will be submitted to the WP or CS Leaders in advance of the eGA. The afternoon of day 2 is scheduled to accommodate a TRUE ECOM meeting for WP-Leaders and -Deputies (only).





Final TRUE Project Meeting

The final **TRUE project meeting will take place in late January in the weeks being the 18th or 25th of January**, and partners should keep both weeks free. It is anticipated that the Monday will be a ‘travel day’ with the full-GA being confined to Tuesday and Wednesday of that week only. A TRUE-ECOM will be held on the Thursday morning for WP-Leaders and -Deputies (only). The exact week will be agreed at the next TRUE ECOM, and partners will be informed by email from the Coordination team (JHI, WP9).

LegValue Conference & Founding-membership of the ‘legacy LIN’

Please also note the date for the **final conference of our sister-project ‘LegValue’** (www.legvalue.eu), which will take place as a one-day event during the week beginning Monday 15th March 2021. As well as showcasing key aspects of TRUE, **this conference will also aim to formally elect the first Organising Committee, Chairperson, and agenda of the legacy LIN.**





6. Project Reporting

2nd Periodic Report

At the beginning of Year 4 of the project (by the 31st May 2020), TRUE will submit its 2nd Periodic Report to the EC-REA (Research Executive Agency), summarising all project activities and achievements covering the period of October 2018 to March 2020.

All data collected from the partners in Year 3 of the project as outlined in Deliverable D9.5 Annual Activity Plan – Year III (D53) (available on the TRUE website [here](#)) will be reviewed and collated to produce TRUE’s Second Periodic Report.

After consultation with the TRUE Project Officer, and again as a consequence of the COVID-19 social distancing restriction, a face-to-face meeting with the external expert reviewers of the 2nd Periodic Report will not necessarily be required: unless the expert reviewers have questions which they need addressed ‘face-to-face’ by specific WP leaders. In which case, the scheduled date of June 25th will be used for an e-conference - and hosted by the Project Officer via the EC-REA. It is therefore important that WP-Leaders and -Deputies keep June 25th ‘20 set-aside, as originally timetabled.





Final Project Report

The final project report will consist of two parts and are defined as follows.

- **Final technical report as publishable summary of the entire project.**

This will include:

- an overview of the results and their exploitation and dissemination;
- conclusions on the project;
- the socio-economic impact of the project;
- an up-to-date link to the project website; and,
- project logos, diagrams, photographs and videos illustrating its work (if available).

- **Final financial report.**

This will include:

- **final summary financial statement** automatically created by the system, which will constitute the **request for payment of the balance**; and,
- a **certificate on the financial statements (CFS)** for some beneficiaries (*i.e.* JHI, JSI and UHOH).

The coordination team will use the WP-, CS- and KE-Update Forms plus data for the TRUE database to deliver a comprehensive final report. Additional templates are currently being discussed to ensure all outputs and impacts of the project are properly reported.

All Deliverables should be submitted to the EC-REA by month 48 of the project, and therefore **Deliverable-drafts must still be presented to the Coordination team at least 1 month in advance** for editing and formatting. Thereafter, there is a further two months to compile the full Technical and Financial Reports. The timelines for return of the various forms will follow the mechanisms already applied for the 1st and 2nd Periodic Reports, and details will be circulated to all partners via by the Coordination team before month 42 (September '20), and WP-Leaders thereafter.





Work Package-, Case Study- and Knowledge Exchange-Reporting

Templates for Work Package (WP) Leaders (and Deputies), Case Study (CS) Leaders and all-partners Knowledge Exchange (KE) reporting have been prepared and are available on the **TRUE SharePoint**. Their aim is to ease the completion of the Periodic and Final Reporting *and* to help ensure robust management and flow of data. Several types of data gathering exercises are necessary and briefly outlined below (for more details see Deliverable D9.5 Annual Activity Plan – Year III (D53) (available on the TRUE website [here](#)).

Work Package Leaders Update Forms

A **WP Update Report** template has been circulated to WP Leaders to summarise progress in broad terms, and to highlight the RAG (Red, Amber, Green) status of WP Milestones and Deliverables.

Case Study Leaders Update Forms

Specific **CS Report templates** are available for each CS leader to summarise CS activities and RAG status on progress submitted. The report also summarises trials to be carried out that year, and so the data expected by the database manager.

All partners KE (Knowledge Exchange) Forms

A specific **KE and Dissemination Report** template have also been circulated to each partner to report such activities.

Collectively, the WP, CS and KE reports are important documents and they have been carefully designed to provide information and data which has been either specifically requested by the EC for Periodic Reports, or to inform various elements of the TRUE work-plan including data-flow and so the development of the Data Management Plan (DMP).





The TRUE 'Impact Strategy and Legacy Plan'

The content of the WP and CS Update Forms are also extended to capture key innovations that are being developed. In addition, a **scoping exercise** to identify the best **routes to commercial exploitation of methods** tested and/or developed, also for novel **products** generated for human, animal and aquaculture markets, was completed in Year III of the project. The data collected have been used and communicated to the SAB and ISAB to help:

- ensure the IPR and Innovations stemming from the project are **properly exploited** and **protected**;
- **secure the project legacy** and be used to **showcase** the varied type of outputs produced by TRUE; and,
- ensure all products and tools generated **fully acknowledge the project** and **its funding body**.

The **TRUE Innovation and IP Form** has also been returned by all partners, who have been asked to **carefully and critically re-evaluate any potential IPR and Innovations** to fully gauge the impact of the project (to be reported in the final report due in May 2020).





Annex I: Background to the TRUE project

Executive Summary

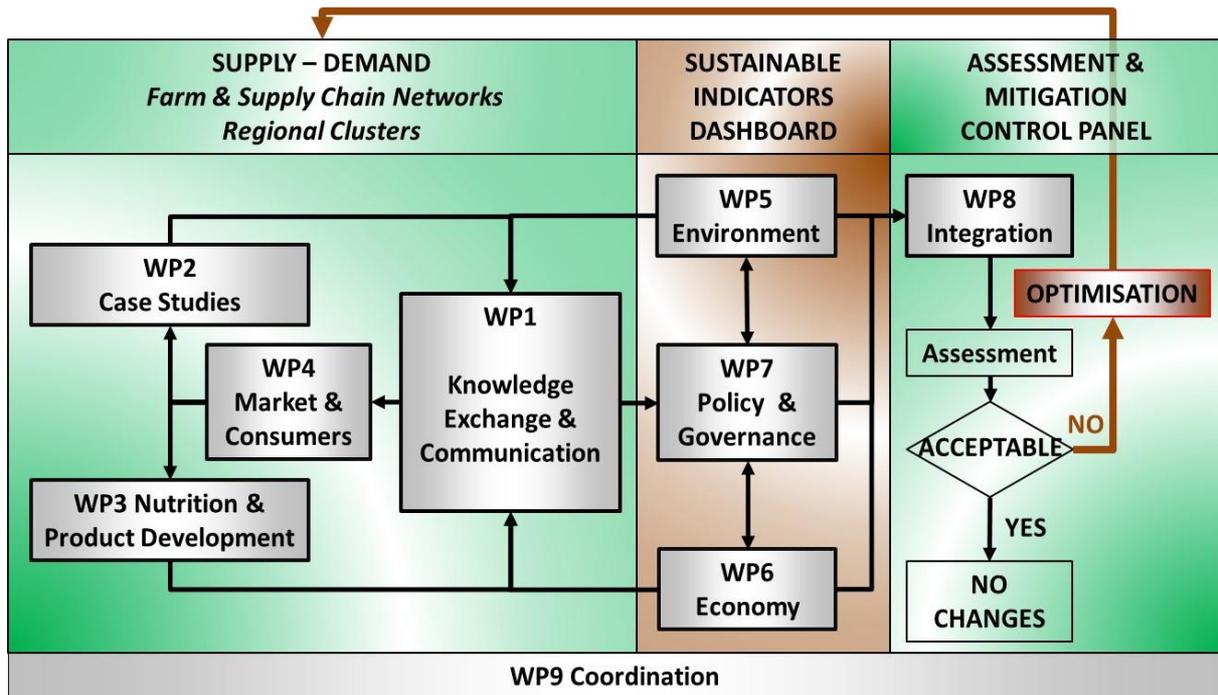
TRUE's perspective is that the scientific knowledge, capacities and societal desire for legume supported systems exist, but that practical co-innovation to realise transition paths have yet to be achieved. TRUE presents 9 Work Packages (WPs), supported by a *Intercontinental Scientific Advisory Board*. Collectively, these elements present a strategic and gender balanced work-plan through which the role of legumes in determining 'three pillars of sustainability' – 'environment', 'economics' and 'society' - may be best resolved.

TRUE realises a genuine multi-actor approach, the basis for which are three *Regional Clusters* managed by WP1 ('*Knowledge Exchange and Communication*', University of Hohenheim, Germany), that span the main pedo-climatic regions of Europe, designated here as: *Continental, Mediterranean and Atlantic*, and facilitate the alignment of stakeholders' knowledge across a suite of 24 Case Studies. The Case Studies are managed by partners within WPs 2-4 comprising '*Case Studies*' (incorporating the project database and *Data Management Plan*), '*Nutrition and Product Development*', and '*Markets and Consumers*'. These are led by the Agricultural University of Athens (Greece), Universidade Catolica Portuguesa (Portugal) and the Institute for Food Studies & Agro Industrial Development (Denmark), respectively. This combination of reflective dialogue (WP1), and novel legume-based approaches (WP2-4) will supplies hitherto unparalleled datasets for the '*sustainability WPs*', WPs 5-7 for '*Environment*', '*Economics*' and '*Policy and Governance*'. These are led by greenhouse gas specialists at Trinity College Dublin (Ireland; in close partnership with Life Cycle Analysis specialists at Bangor University, UK), Scotland's Rural College (in close partnership with University of Hohenheim), and the Environmental and Social Science Research Group (Hungary), in association with Coventry University, UK), respectively. These *Pillar WPs* use progressive statistical, mathematical and policy modelling approaches to characterise current legume supported systems and identify those management strategies which may achieve sustainable states. A *key feature* is that TRUE will identify key *Sustainable Development Indicators* (SDIs) for legume-supported systems, and thresholds (or goals) to which each SDI should aim. Data from the *foundation WPs* (1-4), to and between the *Pillar WPs* (5-7), will be resolved by WP8, '*Transition Design*', using machine-learning approaches (e.g. *Knowledge Discovery in Databases*), allied with *DEX* (*Decision Expert*) methodology to enable the mapping of existing knowledge and experiences. Co-ordination is managed by a team of highly experienced senior staff and project managers based in The Agroecology Group, a Sub-group of Ecological Sciences within The James Hutton Institute.



Work Package Structure

Flow of information and knowledge in TRUE, from definition of the 24 case studies (left), quantification of sustainability (centre) and synthesis and decision support (right).



Project Partners

Nº	Participant organisation name (and acronym)	Country	Organisation Type
1 (C*)	The James Hutton Institute (JHI)	UK	RTO
2	Coventry University (CU)	UK	University
3	Stockbridge Technology Centre (STC)	UK	SME
4	Scotland's Rural College (SRUC)	UK	HEI
5	Kenya Forestry Research Institute (KEFRI)	Kenya	RTO
6	Universidade Catolica Portuguesa (UCP)	Portugal	University
7	Universitaet Hohenheim (UHOH)	Germany	University
8	Agricultural University of Athens (AUA)	Greece	University
9	IFAU APS (IFAU)	Denmark	SME
10	Regionalna Razvojna Agencija Medimurje (REDEA)	Croatia	Development Agency
11	Bangor University (BU)	UK	University
12	Trinity College Dublin (TCD)	Ireland	University
13	Processors and Growers Research Organisation (PGRO)	UK	SME
14	Institut Jozef Stefan (JSI)	Slovenia	HEI
15	IGV Institut Fur Getreideverarbeitung GmbH (IGV)	Germany	Commercial SME
16	ESSRG Kft (ESSRG)	Hungary	SME
17	Agri Kulti Kft (AK)	Hungary	SME
18	Alfred-Wegener-Institut (AWI)	Germany	RTO
19	Slow Food Deutschland e.V. (SF)	Germany	Social Enterprise
20	Arbikie Distilling Ltd (ADL)	UK	SME
21	Agriculture And Food Development Authority (TEAG)	Ireland	RTO
22	Sociedade Agrícola do Freixo do Meio, Lda (FDM)	Portugal	SME
23	Eurest - Sociedade Europeia De Restaurantes Lda (EUR)	Portugal	Commercial Enterprise
24	Solintagro SL (SOL)	Spain	SME
25	Public Institution Development of the Medimurje County (PIRED)	Croatia	Development Agency

*Coordinating institution





Objectives

Objective 1: Facilitate knowledge exchange (UHOH, WP1)

- *Develop a blue-print for co-production of knowledge*

Objective 2: Identify factors that contribute to successful transitions (AUA, WP2)

- *Relevant and meaningful Sustainable Development Indicators (SDIs)*

Objective 3: Develop novel food and non-food uses (UCP, WP3)

- *Develop appropriate food and feed products for regions/cropping systems*

Objective 4: Investigate international markets and trade (IFAU, WP4)

- *Publish guidelines of legume consumption for employment and economic growth*
- *EU infrastructure-map for processing and trading*

Objective 5: Inventory data on environmental intensity of production (TCD, WP5)

- *Life Cycle Analyses (LCA) -novel legumes rotations and diet change*

Objective 6: Economic performance - different cropping systems (SRUC & UHOH, WP6)

- *Accounting yield and price risks of legume-based cropping systems*

Objective 7: Enable policies, legislation and regulatory systems (ESSRG, WP7)

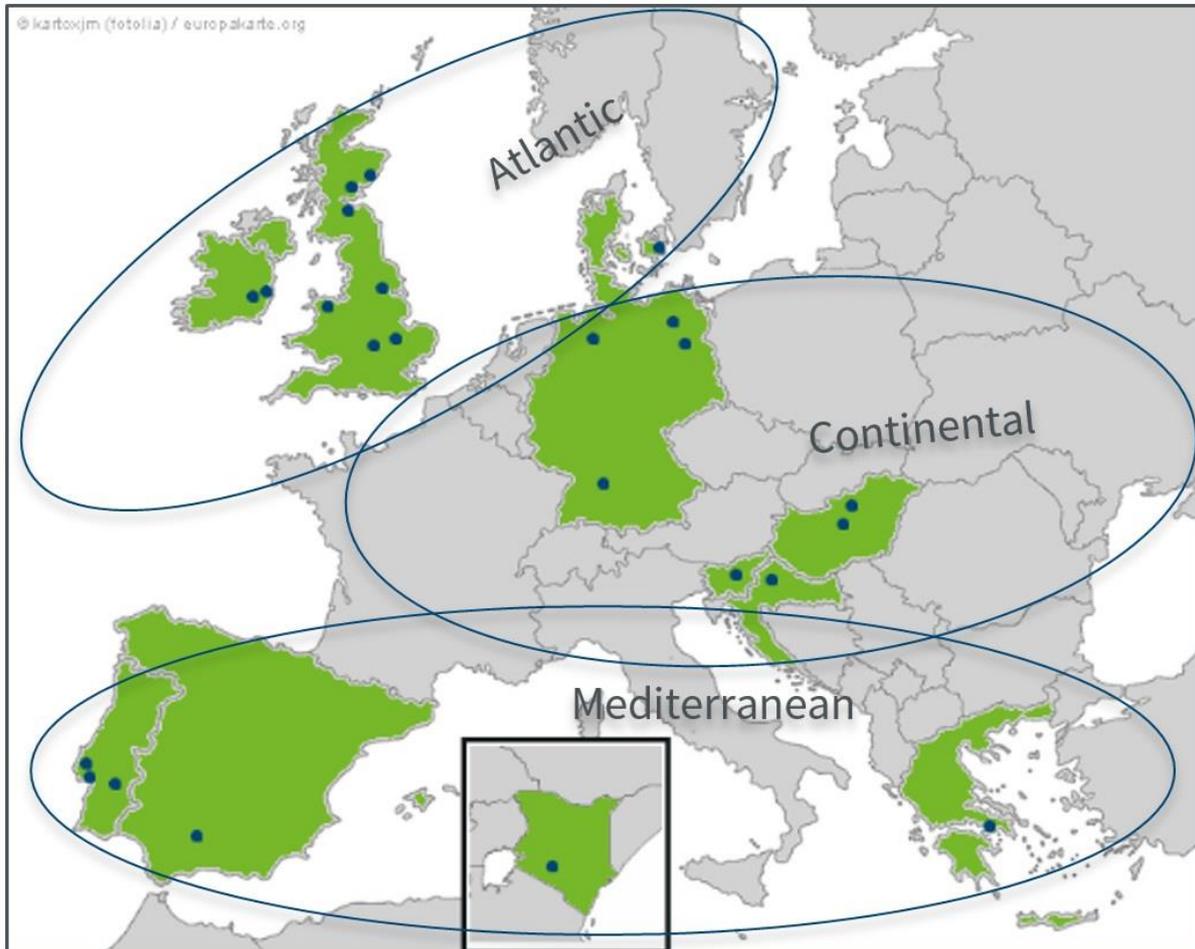
- *EU-policy linkages (on nutrition) to inform product development/uptake*

Objective 8: Develop decision support tools: growers to policy makers (JSI, WP8)

- *User friendly decision support tools to harmonise sustainability pillars*



Legume Innovation Networks



Knowledge Exchange and Communication (WP1) events include three TRUE European Legume Innovation Networks (ELINs) and these engage multi-stakeholders in a series of focused workshops. The ELINs span three major pedoclimatic regions of Europe, illustrated above within the ellipsoids for Continental, Mediterranean and Atlantic zones.





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Disclaimer

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