TO DEVELOP SUSTAINABLE LEGUME-BASED FARMING SYSTEMS, AGRI-FEED AND FOOD CHAINS IN THE EU



- The goal of LEGVALUE is to pave the road to develop sustainable and competitive legume-based farming systems and agri-feed and food chains in the EU.
- The project will assess both the economic and environmental benefits for the EU agro industry to widely produce and use legumes in a sustainable manner.
- Reflecting the market diversity, LEGVALUE will demonstrate the added value of various legume value chains and will provide a range of solutions to improve the economic interest of all involved in the legume value chains.
- LEGVALUE will contribute to increase the autonomy/ self-sufficiency of the EU regarding the production of legume proteins for both feed and food.

A CONSORTIUM OF 24 PARTNERS THE PROJECT WILL WORK SCIENTIFICALLY AT 5 LEVELS

To design realistic scenarios for arable and grassland **Scientific** systems based on legumes, accounting for benefits and risks from agronomy, environment and economy

> To analyse the innovation opportunities and bottlenecks and, through signposting, provide lessons learned for a successful

transition

Sociotechnological To outline the dynamics of transition pathways to the increased use of legumes in sustainable European cropping systems

Agricultural Value To demonstrate the agronomic and ecosystem service value

Industrial agri-food To provide information to facilitate trade and innovation chain

To inform policy makers at local regional and national level Policy

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ADAS UK Limited (ADAS)



LegVALUE is a 4 year project which began on June 1st 2017 and concludes May 31st 2021.

HOW IT WILL WORK

WP7 - Consortium coordination and project management **FARM** WP4 (ACT) **NETWORKS POLICIES** WP1 (ACT) **FARMS** WP6 (ACT) WP3 (ACT) **DISSEMINATION** COMMUNICATION **MARKETS** WP2 (ACT) **VALUE CHAINS VALUE** WP5 (ACT) CHAIN PILOT **TRANSITIONS CASES PATHS**

IMPACTS AND GOALS

OUTPUTS,



RESEARCH ACTIVITIES

24 FARM NETWORKS + 31 VALUE CHAINS

EXPERT CONSULTATIONS

Surveys and workshops with actors (WP1, WP2, WP3, WP4, WP5)

OUTPUTS FOR THE STAKEHOLDERS

ON-FARM ASSESSMENTS (WP1)

- Economic and environmental benefits and impacts Knowledge on the
- agroecological functions and ecosystem services provided
- Scenarios by out-scaling legume-based cropping and grassland systems in EU
- Decision-support system to choose the legume-based cropping systems
- Maps of EU areas suitable for growing legumes and achievable yields

LEGUME VALUE CHAINS AND MARKETS (WP2 & WP3)

Technological breakthroughs and new added-values in feed and

OUTPUTS GENERATED BY LEGVALUE ON

- food supply chains • Recommendations on more
- competitive chains
- Identification of local and regional levers in the development of legumes in the EU
- Identification of local and regional levers
- Easy-to-use tool for farmers to calculate the economic value of legumes
- Market information system

POLICY AND TRANSITION PATHS (WP4 & WP5)

- Identification of policy needs
- Identification of good practices
- Recommendations on policy
- measures • Bottlenecks and opportunities

in food and feed value chains

Market information system

environment

practices manuals

Policy guidelines and good

• Identification of the role of

stakeholders and enabling

SCALING UP

DISSEMINATION AND KNOWLEDGE TRANSFER (WP6)

Project outputs communicated and disseminated to stakeholders and policy makers Adoption of project outputs by the target groups at national level and European levels

SCALING OUT

OUTCOMES RESULTING FROM THE USE OF LEGVALUE OUTPUTS BY THE TARGET GROUPS AND CHANGES IN THE LEGUME SECTOR

OUTCOMES AND CHANGES FROM WP1

- Improved farmer knowledge on the best options for growing legumes considering economic and ecological benefits and risks
- Improved knowledge on the choices of legumes locally adapted to specific pedoclimatic environments
- More farmer options to choose between the organic and conventional farming systems
- Improved farmers' informed decision making

OUTCOMES AND CHANGES FROM WP2+WP3

- New organisation designs of legumes supply chain and added value sharing
- Institutional changes promoting more competitive supply chains

and feed products

- Development of innovative food
- Knowledge on the conditions to facilitate the creation of a

Use of price setting

mechanisms

European legume market. Market information scenarios

OUTCOMES AND CHANGES FROM WP4 + WP5 Best practices to develop legume

- based value chains
- Successful transition pathways for European legume value chains
- Scenarios for legume value chain development across Europe
- Design of successful transition pathways with the identification of the role of the subsequent
- environment Market information scenarios

stakeholders and the enabling

EXPECTED IMPACTS OF LEGVALUE

OVERALL GOAL

To develop sustainable and competitive legume-based farming systems and agri-feed and food chains in the EU

INDICATORS FOR IMPACT ASSESSMENT

- Increase in the land area devoted to legume crops and higher legume production in the EU
- Increased demand of EU legumes by the agri-food and feed chains. Reduction of EU legume imports and increase of exports
- Reduced use of pesticides and fertilizers to grow legumes. Lower greenhouse gas emissions due to short distance production and processing of legumes in the EU.
- Development of new legume based food and feed product development Increased competitiveness of EU agri-industries, domestically and internationally
- New policy designs and institutional changes promoting legume production in the EU
- Perennial European legume scientific network with a strong link with the stakeholders