



**Farming Transitions:
Pathways Towards Regional Sustainability of Agriculture in
Europe**

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**Institutional Support Needs and
Evidence-based Multi-level
Policy Recommendations**

WP6 Final Report

(Task 6.10 / Deliverable 6.1)

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EXECUTIVE SUMMARY

The report at hand is providing an overview of key results of FarmPath work package 6 (Institutional Support Needs and Evidence-based Multi-level Policy Recommendations) in a cross-national perspective, based on the related work of the research teams in seven EU study countries (Bulgaria, the Czech Republic, France, Germany, Greece, Portugal and the United Kingdom/Scotland).

The results are presented in two main parts, a 'Cross-national Policy Analysis' (section 2) and 'Institutional support needs and policy recommendations – results from seven EU countries' (section 3).

Section 2 starts out with a short introduction to the role of policy in a transition theory perspective against the background of the multi-level governance approach of the European Union. The policy recommendations elaborated within the framework of the FarmPath project reflect the relevance of vertical and horizontal interaction, given that multi-level governance and cross-sectoral coordination is among the four most relevant themes addressed. From the angle of transition theory, policies and governance arrangements are important elements of a regime, enabling or hindering niche innovations and transition processes. A second sub-section is dedicated to a synopsis of strategies and policies relevant to sustainability (in general as well as the sustainability of agriculture more specifically) in a cross-national perspective. National strategies and policies are in place in all seven FarmPath study countries, but address the sustainability dimensions to varying degree. At this, there is no clear single bias towards a specific dimension across countries, but the focus differs between individual strategies and policies. A desktop-based assessment of the policy framework in terms of the three dimensions of 'polity' (form), 'policy' (content) and 'politics' (process) identifies the 'content' dimension (i.e., including the whole policy cycle of problem identification, solutions, implementation, evaluation etc.) as central in the study countries; this is echoed by the fact that the content-related 'policy' dimension is the one by far most addressed by the recommendations formulated.

Section 3 first provides an overview of the overall procedure of deriving policy recommendations. In order to develop recommendations that are context-specific and can at the same time be generalized, a range of diverse sources (findings from case studies, desktop analyses, and stakeholder/expert workshops) were used in the research across FarmPath work packages. A specific methodological feature was the transdisciplinary approach applied in the co-construction of findings together with local- to national-level stakeholders. The WP6 policy recommendations themselves – targeted at policy actors in the fields of agriculture and rural development, as well as innovation, research and sustainable development at the European and national levels – are available in a policy brief on 'Regional sustainability of agriculture: adapting institutions and policies to enable transition', structured along ten main themes, together with an introduction to the respective issues and empirical findings they are based on. The second part of this report's section 3 does not repeat these recommendations, but provides complementary information, highlighting the relevance of the individual themes in qualitative as well as quantitative terms. Based on three criteria – highest percentage share among the ten themes, highest number of study countries represented in a theme, and named as most relevant by national research teams – four top-ranking themes were identified. These are: 'Enabling innovation: building capacities and knowledge infrastructure' (theme 1), 'Enabling cooperation and networking' (theme 2), 'Multi-level governance and cross-sectoral coordinated strategies for sustainable development' (theme 6), and 'Encouraging regional differentiation' (theme 8). In a transition theory perspective, the crucial role of theme 2 (and the closely-related theme 1) is underlined by the importance of networking for the spreading of niche innovations through so-called 'network anchoring'. Theme 6 and theme 8 point to the role of policy for facilitating or hindering niche develop-

ment and transition processes against the background of the challenges associated with the European Union's multi-level framework.

In terms of a cross-national comparison, the results are generally mostly heterogeneous, not revealing patterns specific to European supra-regions (in the case of FarmPath: western Europe – France and UK/Scotland, central Europe – the Czech Republic and Germany, and southern Europe – Bulgaria, Greece and Portugal). This applies first of all to the cross-national policy analysis. Country- and region-specific characteristics are identified with regard to the policy recommendations: For instance, in the former communist countries of Bulgaria and the Czech Republic, lack of trust among farmers due to experiences with collectivism are identified as a specific hindering factor (related to theme 2, 'Enabling cooperation and networking'). Furthermore, some commonalities between southern European countries (Bulgaria, Greece and Portugal) are evident in terms of rural infrastructure needs and shortcomings in organizational setup of farm advisory services (related to theme 5, 'Improving the image of agriculture and rural life in society').

1 INTRODUCTION

1.1 Objectives and steps of work package 6

According to the FarmPath Description of Work (DoW)¹, the objective of work package (WP) 6 is to **identify institutional support needs and to develop policy recommendations** through:

- assessment of possible institutional arrangements, support measures and required socio-technical networks amongst **actors** within the farming community, policy, technology and wider society that can facilitate transition to sustainable agriculture
- identification of evidence-based policy recommendations to facilitate transitions to sustainable agriculture at farming system, regional, national and European levels
- identification of mechanisms for providing viable models for young farmers
- identification of mechanisms for enabling regionally sustainable combinations of these models
- identification of institutional, social and technological **innovations** and investment needs
- participatory **stakeholders** engagement

Combining desk-based research with feedback from stakeholders, WP6 tasks (T) in line with the DoW² include:

- T6.1: WP Leader to work with Science Leader to review EU policy and further develop concept and methods
- T6.2: **Desktop analysis** of EU policy framework esp. CAP (Pillar 1 and 2) taking in ongoing policy discussion, other relevant EU policy (regional development, education)
- T6.3: Identify institutional supports and policy recommendations based on WP3 and WP5 findings

¹ FarmPath Description of Work, p. 19 ff. of workplan table

² Cp above

- T6.4: Develop guidelines for national-/regional-level policy analysis; based on the results of T6.1-6.3
- T6.5: **National-/regional-level policy analysis** (for each of the seven field research countries)
- T6.6/4.8: **Contribution to WP4**: Specifically address issues relating to young farmers and new entrants in policy analysis and institutional recommendations
- T6.7: **National stakeholder workshops**: bring together National Stakeholder Partnership Groups with participants in regional scenario³ analysis, **initiatives** and additional policy makers and stakeholders to discuss policy recommendations
- T6.8: **National reports** based on policy analysis and National Stakeholder Partnership Group feedback (for each of the seven field research countries)
- T6.9: Presentation of **policy recommendations** to **final conference** in order to provide feedback and lead to revision of policy recommendations
- T6.10: **Final WP6 report**: evidence-based policy recommendations
- T6.11: **Policy brief** (fact sheet) summarising policy recommendations in plain language

1.2 Purpose and content of the document at hand

In the FarmPath policy brief on ‘Regional **sustainability of agriculture**: adapting institutions and policies to enable transition’⁴ (cp section 1.1 above: T6.11, WP6 Deliverable 6.2), the essence of the recommendations derived from the project work is presented. Recommendations are structured along ten main themes, together with an introduction to the respective issues and empirical findings they are based on.

In line with the DoW⁵, the policy brief presents empirical examples of best practice in **institutional** and **governance** structures for enabling transition at **regional** level, and highlights options for social and technological investment. Furthermore, recommendations are related to specific European regions (i.e. in the case of the FarmPath study countries: western, central and southern Europe, and Bulgaria and the Czech Republic as new entrant states) where applicable.

Parallel to the policy brief a FarmPath handbook on ‘Facilitating sustainability of agriculture at regional level: principles and case studies from across Europe’ was prepared within the framework of WP5 (cp section 6.1). While the policy brief particularly addresses policy actors in the fields of agriculture and rural development, as well as innovation, research and sustainable development at the European and national levels, the handbook also provides guidance for actors of, and activities at, the regional and local levels.

The report at hand is not intended to duplicate the contents of the policy brief in terms of the issues, findings and recommendations presented there. Rather, the final report is to complement the policy brief by providing an overview of the achievements of WP6 as a whole as well as providing a cross-national perspective based on the seven WP6 national reports (T6.8) prepared by each FarmPath fieldwork team.

³ Later on in FarmPath project work referred to as ‘visioning process’.

⁴ The document was first circulated as a hard copy during the FarmPath/SOLINSA final conference in Brussels on 3 December 2013. A revised version of the policy brief was prepared subsequently.

⁵ FarmPath Description of Work, p. 19 ff. of workplan table

A glossary of terms used in the context of the FarmPath project work (e.g. concerning the overarching transition theory) was elaborated. Those terms relevant to the report at hand are included in the Annex, section 6.2.

2 CROSS-NATIONAL POLICY ANALYSIS

2.1 The role of policy in a transition theory perspective

The WP6 ‘Desktop analysis of EU policy framework’ (T6.2, cp section 1.1) points to the multi-level approach of the European Union with national, regional and local governments under its framework, and the complexity resulting from the interaction between state and non-state actors from the various levels. Cases of ‘mismatch’ between governance approaches at different levels have been identified in FarmPath research, pointing to the challenges associated with the multi-level framework (Sutherland et al., forthcoming). Depending on the individual national governance models, the implementation of policies varies between EU member states under the common framework. This heterogeneity is reflected in the following analysis of strategies and policies relevant to sustainability (cp section 2.2).

From a transition theory perspective⁶ – constituting the overarching theoretical concept of FarmPath – policies and **governance** arrangements constitute elements of a socio-technical **regime**, thus influencing the framework conditions for a **niche** innovation to unfold and **transition** to take place. More specifically, if a niche attains policy support, this is an instance of ‘institutional anchoring’ as defined by Elzen et al. (2012). At this, several sectors might be concerned by a policy influencing a niche (Sutherland et al., forthcoming), which points to the need for cross-sectoral coordination. The influence between the analytical levels is reciprocal, with niches potentially inducing policy change and the policy level also being influenced by super-ordinate **landscape** factors (cp FarmPath ‘Draft policy working document’, 2012).

The policy recommendations elaborated within the framework of the FarmPath project echo the relevance of vertical and horizontal interaction, given that themes related to facilitating networking, multi-level governance and cross-sectoral coordination are among the four most relevant themes addressed (cp section 3.2).

2.2 Strategies and policies relevant to sustainability (of agriculture) in a cross-national perspective

Apart from the above-named desktop analysis of EU policy framework, the national and regional policy framework of each FarmPath country⁷ relevant to the topics of sustainability in general and (regional) **sustainability of agriculture** was studied (T6.8).

National- and regional-level strategies and policies aiming at sustainability (of agriculture)

At the EU level, during the 2007-2013 funding period the Sustainable Development Strategy (renewed in 2006) addressed seven related key challenges. Furthermore, the Europe 2020 Strategy,

⁶ For a definition of terminology please refer to the glossary in annex 6.2.

⁷ i.e. Bulgaria (BG), the Czech Republic (CZ), France (FR), Germany (DE), Greece (GR), Portugal (PT), and Scotland (SCOT)

adopted in 2010, pursues ‘sustainable growth’ among its three priorities. The CAP as the most relevant EU-level policy with regard to farming practices focuses on sustainability aspects as well.

Within this framework, there are national-level strategies on overall sustainability in all study countries, and partly some targeted at the regional level (cp **Table 1**). (Regional) sustainability of agriculture is not directly addressed as a topic of its own by **strategies** and **policies**, but is covered in terms of partial aspects by general sustainability strategies and other policies. At this, the individual sustainability dimensions⁸ are covered to varying degree.

In the following sections, the situation in the seven study countries is presented by regional clusters, i.e. western Europe (France and Scotland), central Europe (the Czech Republic and Germany) and southern Europe (Bulgaria, Greece and Portugal). Overall, there are no clear region-specific patterns to be identified. Apart from belonging to the same European supra-regions, agricultural policy is explicitly stated to be mainly shaped by the CAP in the desktop analyses on the policy framework of the Czech Republic, Bulgaria and Greece.

In the western European study countries, in **France** there are new national and regional strategies in place towards sustainable development in general. Regarding the sustainability of agriculture, local action plans, often based on agri-environmental schemes, play a role in terms of environmental sustainability. A concrete risk to sustainability posed by agricultural policy is seen in the stalling of milk quotas. For sustainability in general the **Scottish** Land Use Strategy is most relevant, covering the ecological, social and economic dimensions. Additional Scottish strategies are of importance as well, such as the Biodiversity Strategy. In terms of national policies, planning and renewable energy policies are most relevant concerning the sustainability of agriculture.

Looking at the central European countries studied, in the **Czech Republic** there are three national-level strategies relevant for sustainability of agriculture, i.e. the Strategy for Growth, the National Strategic Plan for Rural Development, as well as the national Strategy of Regional Development. Regional-level development strategies are also in place. There is a national-level sustainability strategy in place in **Germany**, as well as regional sustainability strategies in some of the federal states. In terms of the sustainability of agriculture, land use – i.e. the reduction of agricultural land’s consumption for land development – is the only issue addressed by the above-named national strategy. In terms of policies, the national ‘Joint Task for the Improvement of Agricultural Structures and Coastal Protection’ (GAK) addresses agriculture and broader rural development.

In the southern European study countries there are also a range of strategies and policies in place relevant to sustainability in general and of agriculture. From **Bulgaria** it is reported that the National Strategy for Sustainable Development also concerns agriculture and rural areas, with a balanced view on the ecological, social and economic sustainability dimensions. There are further sub-strategies, of which the most relevant ones are the National Strategic Plan for Rural Development (covering the three sustainability dimensions) and the National Agricultural Development Strategy (covering mostly the economic and ecological dimensions). Concerning sustainability in general, EU programming is reported to be most relevant for the strategic direction related to rural areas in **Greece**. Furthermore, spatial planning is named as a relevant national policy field. There are 13 regional spatial plans, complemented by additional spatial plans on topics such as alternative energy, tourism, and industry. In **Portugal** there is a National Strategy for Sustainable Development in place, and sustainability aspects are also addressed in the National Strategic Plan on Rural Development. There are no strategies

⁸ In FarmPath, a fourth – institutional – dimension in addition to the ecological, social and economic ones was studied. When speaking of the ‘three dimensions’ in the following sections, the ecological, social and economic dimensions are referred to.

targeted at the sustainability of agriculture. Policies mostly focus on the environmental dimension of the sustainability of agriculture, but with regard to rural areas also cover the economic and social dimensions. The range of policy documents based on the existing strategies is reported to create an unclear picture.

Table 1: National and regional strategies and policies aiming at sustainability in the FarmPath study countries

European supra-region	Country	National/regional sustainability strategies/policies	
		Sustainability in general covered by...	(Sustainability of) agriculture covered by...
West	FR	<ul style="list-style-type: none"> National- and regional-level sustainable development strategies 	<ul style="list-style-type: none"> Regional-level strategies: local action plans
	SCOT	<ul style="list-style-type: none"> Land use strategy most relevant Additional Scottish strategies (e.g. biodiversity) 	<ul style="list-style-type: none"> Planning and renewable energies policy
Central	CZ	<ul style="list-style-type: none"> National strategy for growth National strategic plan for rural development National strategy of regional development Regional development strategies 	<ul style="list-style-type: none"> Agricultural policy mainly shaped by CAP
	DE	<ul style="list-style-type: none"> National sustainability strategy Some regional-level sustainability strategies 	<ul style="list-style-type: none"> National strategy addressing only partial issue Joint task for the improvement of agricultural structures and coastal protection (GAK) & national framework regulation
South	BG	<ul style="list-style-type: none"> National strategy for sustainable development 4 sub-strategies 	<ul style="list-style-type: none"> National strategy for sustainable development (most relevant sub-strategies: <ul style="list-style-type: none"> National strategic plan for rural development National agricultural development strategy) Agricultural policy mainly shaped by CAP
	GR	<ul style="list-style-type: none"> General national and regional spatial plans 5 specific spatial plans 	<ul style="list-style-type: none"> Agricultural policy mainly shaped by CAP Cp left
	PT	<ul style="list-style-type: none"> National strategy for sustainable development National strategic plan on rural development 	<ul style="list-style-type: none"> Range of policy documents based on the existing strategic plans

Source: Own compilation based on WP6 national Reports (T6.8)

Regarding a **change in institutional or governance arrangements**, there are no specifically targeted national strategies in place in any of the seven study countries. However, such objectives are pursued within the context of other strategies or programmes, e.g.:

- Improvements of the administrative capacity of the institutions involved in strategies' implementation, particularly at local level (BG)

- Objective within the strategy of regional development to improve institutional frameworks for the development of regions, linked with support and **collaboration** at the local and regional levels (CZ)
- National-level programme aimed at bureaucracy reduction (DE)
- Institutional issues contained in regional- and national-level programmes and schemes (FR)
- No strategies in place; important issues are: administrative decentralization process, participatory elements in the procedures, Leader approach (GR)
- Institutional aspects are incorporated in other programmes, e.g. in the case study region's Strategic Statement of Montemor-o-Novo 2007-2017 (PT)
- Governance reflection (e.g. shift towards polycentric decision-making) included in the Scottish Land Use Strategy (SCOT)

Basic assessment of policy dimensions in the study countries

From the above information derived from desktop analysis, some rough conclusions can be drawn as to the status of the individual policy dimensions⁹ (cp Prittwitz 2011) with regard to sustainability, i.e.:

- **form ('polity')**: the institutional regulatory structures (incl. governance structures)
- **content ('policy')**: the policy cycle of problem identification, solutions (e.g. programmes, measures), implementation, evaluation etc. and
- **process ('politics')**: interaction between policy actors (incl. participation, articulation of interests, conflicts etc.)

Table 2 below provides an overview of the individual study countries' policy dimensions in terms of their positive or negative assessment in relation to sustainability. Across the seven study countries, with no region-specific pattern regarding western, central and southern Europe, there are deficiencies apparent – first of all – in the 'content' dimension, and – second – in the 'form' dimension. Issues related to 'process' are broached only in two cases. This points to shortcomings in the study countries regarding institutional and governance arrangements ('polity') as well as strategies' and policies' unbalanced thematic targeting (not allowing for an integrated consideration of all sustainability dimensions; not specifically targeting sustainability of agriculture), implementation and impact ('policy'). These findings on the policy framework correspond to the different shares of recommendations addressing each of the three dimensions. The largest share of recommendations (69%) relates to 'content', followed by 'form' with 19% and 'process' with only 10% (cp section 3.2).

With regard to 'form', deficiencies are identified in terms of subsidiarity (FR, GR), institutional volatility (PT) and cross-sectoral integration (SCOT).

With regard to 'content', the following deficiencies are identified:

- The existing various strategies and/or policies relevant to sustainability do not focus on the ecological, social and economic sustainability dimensions in a balanced manner (BG, CZ, DE, PT). At this, the imbalance between the SD dimensions does *not* mean that a specific dimension (e.g. the economic one) dominates; rather, the focus differs between individual strategies and policies, no allowing for an integrated three-dimensional sustainability approach. More specifically, while the Bulgarian national strategy for sustainable development covers

⁹ This is also in line with the FarmPath glossary ('policies').

all three dimensions, this does not apply to all of its sub-strategies, e.g. the national agricultural development strategy mostly concentrating on economic and ecological sustainability. This also applies to the policy level, where a positive CAP impact on sustainability is stated through implementation of Rural Development Programmes, however less on the social dimension due to low level of corresponding measures' implementation. In the Czech Republic, focus on the economy prevails, which is explained by the country's short history of EU membership not having allowed for sustainability to unfold as an integrated long-term process yet. In the case of Germany, while the National Framework Regulation covers all three sustainability dimensions, the reduction of agricultural land consumption for land development is the only agriculture-related issue addressed in the national-level sustainability strategy. Finally, in Portuguese policies mostly the environmental dimension of agricultural sustainability is addressed, however also the economic and social dimensions with regard to rural areas.

- The sustainability of agriculture is insufficiently addressed by strategies and/or policies (DE, PT).
- There are difficulties in terms of implementation of sustainability strategies/policies (operationalization, lacking cross-sectoral integration) (CZ, PT).
- There is insufficient positive, or partly even negative, sustainability impact of existing policy measures (DE, FR).

Table 2: Assessment of policy dimensions in the FarmPath study countries regarding sustainability strategies and policies

Assessment of policy dimensions ¹⁰			
Country	Form – 'polity'	Content – 'policy'	Process – 'politics'
BG	o	+-	o
CZ	o	-	o
DE	o	-	o
FR	-	-	-
GR	-	o	o
PT	-	-	-
SCOT	-	o	o

Source: Own compilation based on WP6 national Reports (T6.8)

Current CAP's main impact on the sustainability of agriculture

Looking at the current CAP's main impact on the sustainability of agriculture, the assessment from the FarmPath national research teams' point of view is mixed: regarding four of the seven countries (BG, CZ, GR, SCOT), positive as well as negative impacts are highlighted, for three of the countries (DE, FR, PT) only negative impacts are named (cp **Table 3**). This means that the assessment is heterogeneous across the western, central and southern European countries and there is no region-specific pattern to be identified. The following reasons for the negative or positive assessment of sustainability impact are given in the three EU regional clusters:

In the western European study countries, from the **French** perspective, the influence of **Pillar 1** is negative regarding all three sustainability dimensions as far as the focus on the French (inter)national

¹⁰ Explanation: +: dimension assessed as positive; -: dimension assessed as negative; o: dimension assessed as 'neutral' or no information available from WP6 national reports.

food market share and farm modernization are concerned. A positive assessment is made with regard to agri-environmental measures' impact on the ecological dimension as well as Leader's impact on the social and economic dimensions. Like for the central EU country Czech Republic, it is underlined that allowing for region-specific conditions is crucial (e.g. different needs in flat/productive than in mountainous/less productive areas). In **Scotland** the **CAP** overall is stated to have diverse negative and positive sustainability impacts. While assessed positive regarding the environmental dimension (maintenance of environmentally friendly agricultural land use generally and of extensive agricultural land use in the uplands, highlands and islands), the assessment regarding the social and economic dimensions is negative (explained by weak targeting of policy measures towards regional and rural needs, economic dependence of farms on subsidies, insufficient coverage of restructuring and diversification needs as well as benefitting so-called 'slipper farmers').

In central Europe, regarding the **Czech Republic** the impact of CAP rural development measures on the economic sustainability dimension is evaluated as positive, while less favourable or even negative in terms of the environmental dimension which is explained by insufficient interlinking of the diverse measures, i.e. between the Single Area Payment Scheme (SAPS) and other environment-focused measures as well as between measures within RDP axis 2. For **Germany**, as for other study countries, it can be stated that there are positive as well as negative CAP impacts depending on the Pillars as well as particular RDP axes and measures. A specific negative CAP impact highlighted is that on the development of organic farming, which is assessed to be negatively affected due to support of the provision of renewable energy through farm-based biogas plants.

Similarly heterogeneous in the southern European study countries, in the case of **Bulgaria** a positive impact on sustainability is attested, albeit to a varying degree between sustainability dimensions: mostly economic, but also ecological, while the social dimension less due to corresponding Rural Development Programme (RDP) measures' low level of implementation. Overall, **CAP direct support measures** are assessed to have a more positive or more negative impact depending on production type; the threat of an unbalanced and thus unsustainable development in the long run is seen. **CAP rural development measures** are overall assessed to have a positive impact in ecological as well as economic terms. More specifically, axis 1 is assessed positive regarding the social dimension, axis 2 positive regarding the economic and ecological dimensions, and axis 3 positive to limited extent because of little implementation of measures. For **Greece** a negative economic impact is stated with regard to inequality due to budget allocation (historical model of the Single Farm Payment, SFP). Positive environmental aspects are seen in relation to Cross Compliance and the decoupling of payments (however, there are some deficiencies seen in implementation and control). The **Portuguese** assessment is negative in relation to RDPs as regards the concentration on economic competitiveness of the agro-forestry sector.

Table 3: Sustainability impact of the current Common Agricultural Policy (CAP) in the FarmPath study countries

European supra-region	Country	Current CAP: impact on sustainability of agriculture
West	FR	• Negative: all sustainability dimensions
	SCOT	• Positive/negative: differing between sustainability dimensions
Central	CZ	• Positive/negative: differing between sustainability dimensions
	DE	• Negative: economic, ecological dimensions
South	BG	• Positive/negative: differing between sustainability dimensions, Pillars and RDP axes
	GR	• Positive/negative: differing between sustainability dimensions
	PT	• Negative: economic dimension

Source: Own compilation based on WP6 national Reports (T6.8)

Expected major changes implicated by the CAP reform

Expected changes through the CAP reform from the FarmPath national research teams' point of view mainly concern **measures** and **budgets**.

The following explanations are provided for this expectation:

- Introduction of new **measures** and changes in eligibility in the area of: qualification, knowledge transfer and innovation (new entrant states BG and CZ); environment and natural resources (FR, GR, SCOT)
- **Budget:** negative impacts of cuts to Leader financing (CZ, DE); negative impacts of cuts on agri-environmental schemes, less-favoured areas and investment (DE); change from historical to regional allocation model (FR, GR, SCOT)

2.3 Summary of main results

There are national-level (and partly regional-level) strategies on overall sustainability in all of the seven FarmPath study countries, within which partial aspect of the sustainability of agriculture are covered. This also applies to sustainability of agriculture related to national policies. Generally, the focus of strategies and policies differs between the ecological, social and economic sustainability dimensions.

As is the case for sustainability of agriculture, a change in institutional or governance arrangements is not aimed at by specific national strategies in the FarmPath countries, but aspects of this are incorporated in other strategies or programmes.

In terms of an assessment of the three policy dimensions ('polity', 'policy' and 'politics') in relation to sustainability, there are deficiencies apparent mostly regarding the former two across the study countries, owing to shortcomings in institutional and governance arrangements ('polity') as well as unbalanced thematic targeting (sustainability dimensions, sustainability of agriculture), implementation and impact ('policy').

The assessment of the current CAP's main impact on the sustainability of agriculture is mixed from the FarmPath national research teams' point of view, depending on Pillars, RDP axes and measures.

As an overall result, about half of the seven countries state that impacts are positive as well as negative, and about half state negative impacts only.

Generally, findings are heterogeneous across the western, central and southern European countries, with no pattern specific to these EU supra-regions to be identified.

3 INSTITUTIONAL SUPPORT NEEDS AND POLICY RECOMMENDATIONS – RESULTS FROM SEVEN EU COUNTRIES

3.1 Overall procedure of deriving policy recommendations

Policy recommendations were initially developed by seven FarmPath partner countries, based on a WP6 national-level desktop policy analysis, and results from WP3-5 (cp Annex 6.1). The results elaborated by individual FarmPath country teams were reflected and refined through iterative feedback loops during the second half of 2013 through stakeholder consultation. On the one hand, this involved members of the National Stakeholder Partnership Groups (**NSPG**) and additional experts invited to WP6 national stakeholder workshops (cp section 1.1 above: T6.7). Furthermore, the cross-national results compiled by the WP6 leader (Institute for Rural Development Research, IfLS, Germany) in exchange with the other FarmPath teams were discussed with the FarmPath International Advisory Group (IAG), and participants of the FarmPath final conference to whom the initial version of the policy brief on 'Regional sustainability of agriculture: adapting institutions and policies to enable transition' (cp section 1.1 above: T6.11) was presented.

Regarding the WP6 national stakeholder workshops, the objectives were to disseminate FarmPath results to a wider audience and to revise, refine and validate the preliminary policy recommendations. The target group included national stakeholders associated with the fields of sustainable agriculture and rural development policy, including NSPG members and participants from the WP5 visions and pathways workshops. More specifically, this entailed e.g. representatives of farmers' and other professional associations, of agricultural and other ministries, and researchers, representing the local to national levels.

3.1.1 Use of results from other FarmPath work packages (WP3-5) as a basis for elaborating recommendations

The recommendations developed within the framework of WP6 are based, amongst others, on the results of the preceding WPs 3-5. At this, the relevance of each of the three WPs as a source differed between countries. The integration of the diverse sources – case studies, desktop analysis, workshops – is also stated by some teams to have proved as a challenge.

Work package 3: Case studies of farming initiatives

WP3 entailed 21 **case studies** on innovative regional agricultural **initiatives** conducted in the seven FarmPath fieldwork countries, grouped into seven thematic **clusters**. Overall, research teams evaluate the results as a useful basis for formulating recommendations, however the geographical borders of the initiatives studied as well as their partly overlapping national and regional scope were considered as a difficulty in using them as a source.

Work package 4: Synthesis of farming models for young farmers and new entrants in Europe

In WP4 national-level literature reviews were conducted in the seven FarmPath countries as well as an EU-level literature review on issues related to the ageing of the farming population and farm succession. Although the results can be considered as highly relevant, also given the positive feedback

from stakeholders (e.g. NSPG members), they were least used as input compared to WP3 and 5 results, and informed theme 10 ('Specific measures to support young farmers and new entrants') only to limited extent. This is partly explained by the fact that recommendations were developed in WP5 directly through the pathways workshops, while there were no such workshops in WP3 and WP4.

Work package 5: Assessment of transition pathways to regional sustainability of agriculture

Within the scope of WP5, **visions** for regional sustainability of agriculture for the year 2030 and the pathways potentially leading to them were developed for seven selected study regions in a participatory and transdisciplinary manner (BG: Pazardjik and Plovdiv; CZ: Plzeň region; FR: Pays de Rennes; DE: Freiburg; GR: Imathia; PT: Montemor-o-Novo; and SCOT: Aberdeenshire). Stakeholders participating in four individual workshops on visions and a joint workshop on pathways comprised representatives of four groups, i.e. (1) official interests, (2) farmers, (3) other actors who benefit from the land, and (4) young farmers.

Across the study countries, WP5 results were an important source for formulating recommendations. A challenge discussed among the FarmPath team was the co-construction of results – i.e. a balanced reflection of researchers and stakeholders' perspectives.

3.1.2 Reflection of the transdisciplinary approach: benefits and challenges

A transdisciplinary approach was applied within the scope of work with the NSPGs and stakeholders within the framework of the WP5 workshops on regional visions and pathways (cp previous section) as well as WP6 national stakeholder workshops. Participants in the three (NSPG, WP5 and WP6 workshops) partly overlapped. WP6 workshops served the purpose of presenting the preliminary recommendations against the background of key FarmPath results, and discussing and refining the recommendations.

Below, the key benefits and challenges¹¹ of the approach as assessed by the seven FarmPath field-work teams are presented.

Preparation and participant recruitment phase

It proved a benefit in respect to participant recruitment to have contacts to stakeholders which had been established in previous work, and who therefore could be more easily won for participation.

A challenging aspect faced across study countries and work packages is the expenditure of time and effort for researchers associated with contacting and building mutual trust. In composing a balanced group of various participants, another point is time constraints making it difficult for certain groups to participate (e.g. farmers around harvesting time or representatives e.g. of ministries and professional organizations). Nevertheless, actors covering the desired range of interests and perspectives could be won, for the NSPGs, the WP5 visions and pathways workshops (cp section 3.1.1) as well as WP6 national stakeholder workshops (cp section 3.1).

Process of transdisciplinary work

Among the benefits derived from the process of transdisciplinary work, from several study countries it is reported that those actors who could be won as participants often proved highly motivated and made fruitful contributions. There was positive feedback from participants on the networking potential of the project, the opportunity of bringing in their own opinion, discussion and exchange of views in new actor constellations, i.e. actors from the same or different sectors who would usually not be likely to interact. As observed in Scotland, but also applicable to other study countries, participation

¹¹ Referring to NSPG, WP5 and WP6 if not indicated otherwise.

thus contributed to actors adopting a more differentiated perspective through exchange with others and getting to know other points of view. However, interacting with a range of practice and policy stakeholders yielded a benefit also on the researchers' side in terms of an improved understanding of various views and motivations.

It proved very important to foster participants' sense of ownership in order to maintain their motivation for continuously engaging in the process. This applies to the series of WP5 visions and pathways workshops in the seven study regions as well as the NSPGs who were expected to accompany the researchers' work even over the whole project period.

For WP5 and 6 workshops, protocols to be used in all study countries were prepared in order to ensure cross-national comparability of results. The application of the protocols needed to be done ensuring consistent procedures while at the same time allowing for national and regional specificities. It also became apparent that the workshop discussions required sufficient time in view of introducing (partly non-academic) actors to relatively complex and comprehensive project contents (e.g. theoretical concepts constituting the basis of the WP5 workshops, or preliminary recommendations to be discussed in the WP6 workshops) and allowing for the range of participants' perspectives. Professional facilitation helped to make sure all agenda items foreseen were covered and the range of opinions was adequately represented. Also in view of groups being composed of representatives of diverging interests, experienced facilitators proved crucial. A lesson specifically from the Czech Republic as a post-communist country was the limitation that active citizenship is still being learned, and policy actors participating in the WP5 workshops were reluctant to reveal their future development interests.

Participants' expectations and results of the transdisciplinary work

Among the benefits of the transdisciplinary work to be noted, stakeholders and NSPG members in several study countries found project results useful for their work and expressed interest in disseminating them and carrying them further (e.g. in the study regions). In some of the study regions (e.g. Bulgaria and Portugal) follow-up activities between researchers and stakeholders are undertaken.

On the other hand, participants in some of the study countries were skeptical whether their expectations from the transdisciplinary work, e.g. in terms of achieving substantial results, could be met. This is reported in particular from Germany, Greece and Scotland. E.g., partly scepticism was expressed by participants of WP5 workshops in how far the results would be usable as a basis for region-specific recommendations although a standardized focus group methodology was used to generate them. Balancing the extent of participatory elements and co-construction of results posed a challenge specifically from the Bulgarian, German and Portuguese points of view – i.e. balancing stakeholders' and researchers' perspectives to allow for a participatory approach and still sufficiently reflecting and accordingly adapting stakeholders' input – not least in view of a need for cross-national comparability. Moreover, it had to be considered that stakeholders do not speak with one voice, but a range of interests and perspectives had to be allowed for, e.g. in the framework of WP5 pathways workshops where stakeholders might have agreed on objectives but have different ideas of how to realize them. Where the FarmPath work could connect to an existing negotiation process, it proved easier to find consensus on WP5 visions (e.g. in France).

3.2 Policy recommendations derived from FarmPath research

In the following, selected results of the procedure detailed in section 3.1 are presented. They follow the structure of the policy brief (cp section 1.2), however they do not include the recommendations themselves but provide a complementary analysis of the themes and policy dimensions covered in a cross-national perspective.

Thematic fields addressed by recommendations

The total of recommendations developed by the seven FarmPath research teams targets four dimensions of sustainability, i.e. ecological, social, economic and institutional.

New **institutional** arrangements enabling **transition** towards sustainability constituted one major topical field, including a range of sub-aspects. First, multi-level governance and cross-sectoral coordinated strategies for sustainable development are focused on, i.e. (a) cross-scale interdependencies and cross-sectoral perspectives and approaches (including strengthening the regional and local level, regionalization of measures and participation in political decision making), (b) the setting and harmonising of strategic goals at various policy levels and facilitation of their implementation (including a decreased administrative burden on farmers in terms of timing, organizational setup and adequate support by administrative staff), and (c) the assessment and monitoring of policy outcomes with regard to their sustainability impact. Second, cooperation and networking are covered in terms of broad local and regional actor networks (including the role of the Leader programme) as well as cooperation among farmers and the institutional framework necessary.

Building capacities for knowledge infrastructure and innovation form another topical field, including recommendations regarding agricultural education and training, extension services and learning, as well as research-practice exchange for facilitating innovation.

Policy measures and actions addressing specific issues in terms of ecological, social and economic sustainability account for another broader topical field. With regard to the environmental dimension, recommendations for an environment-friendly and resource-efficient farming are formulated. In terms of social sustainability, needs for ensuring viable rural areas are identified, including technical and social infrastructure, societal recognition of agriculture, and allowing for the interrelations between rural demography, public health, climate and employment through integrated policy approaches. Third, the economic dimension is covered by recommendations on the specific needs of small farms, regional marketing strategies and value-added chains as well as consumer-producer relations.

Finally, recommendations are formulated to address the FarmPath project's cross-cutting theme of the needs of **young farmers** and **new entrants** into agriculture.

These topics and aspects were condensed into ten main themes as presented in the policy brief:

- (1) Enabling innovation: building capacities and knowledge infrastructure
- (2) Enabling cooperation and networking
- (3) Reducing the administrative burden on farmers
- (4) Enabling environment-friendly and resource-efficient farming
- (5) Improving the image of agriculture and rural life in society
- (6) Multi-level governance and cross-sectoral coordinated strategies for sustainable development
- (7) Increasing the evidence base of policies
- (8) Encouraging regional differentiation
- (9) Enabling regional marketing approaches for economically viable farming
- (10) Specific measures to support young farmers and new entrants

The analysis presented in the sections below is based on the total of recommendations developed by the seven FarmPath research teams.

The **levels** addressed by recommendations (EU, national, regional, local) – i.e. **actors** at which level are proposed to become active – are not indicated for the individual thematic fields below. This is

due to the fact that often several levels are addressed at the same time. Likewise, information on the types of actors addressed (e.g. EC directorates-general, national ministries, municipal authorities, professional organizations, consumers etc.) is not included for the same reason. This level- and actor-related part of the FarmPath results is contained in the **policy brief**.

Analysis of the thematic fields addressed by recommendations

In order to provide some additional information beyond the contents of the policy brief, the results of a complementary quantitative analysis are presented in the sections below. Amongst others, they illustrate the ten recommendations themes' distribution across countries and policy dimensions.

There was a total of 247 recommendations developed in the project work.¹² Looking at the **percentage shares of the themes**, it is apparent that 'Enabling cooperation and networking' is most frequently represented (16% of total recommendations¹³), followed by 'Multi-level governance and cross-sectoral coordinated strategies for sustainable development' (14%), 'Enabling innovation: building capacities and knowledge infrastructure' (12%) and 'Specific measures to support young farmers and new entrants' (11%). 'Other issues' beyond the ten policy brief themes (8%) mostly regard small farms and nutrition (protein supply) (cp **Figure 1**).

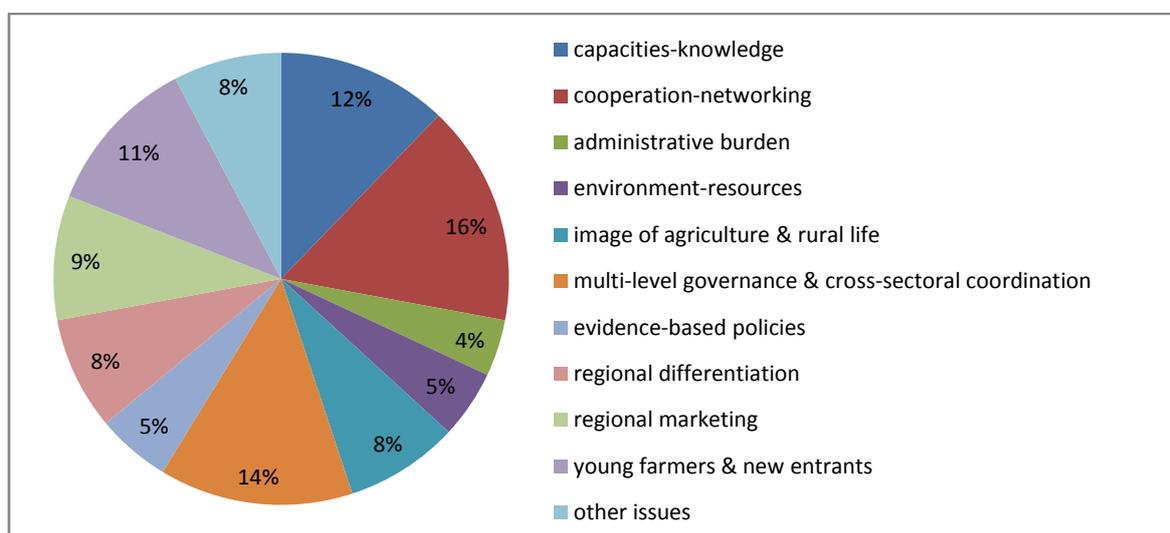


Figure 1: Shares of themes subject to recommendations across all FarmPath study countries (N=247)

Source: Own calculation based on WP6 national Reports (T6.8)

In terms of the **number of countries for which national research teams formulated recommendations on a specific theme**, regarding cooperation/networking (theme 2), multi-level governance/cross-sectoral coordination (theme 6) as well as 'other issues', all seven countries are represented. In terms of the two other themes with the highest percentage shares (capacities/knowledge, theme 1, and young farmers/new entrants, theme 10), four countries are represented each. Five countries are represented each in relation to recommendations on image of agriculture and rural life (theme 5), evidence-based policies' (theme 7), regional differentiation (theme 8), and regional marketing (theme 9) (cp **Figure 2**).

¹² Sub-recommendations were counted as individual recommendations.

¹³ The number of recommendations developed differed between the seven national FarmPath research teams, depending on the needs seen by the teams.

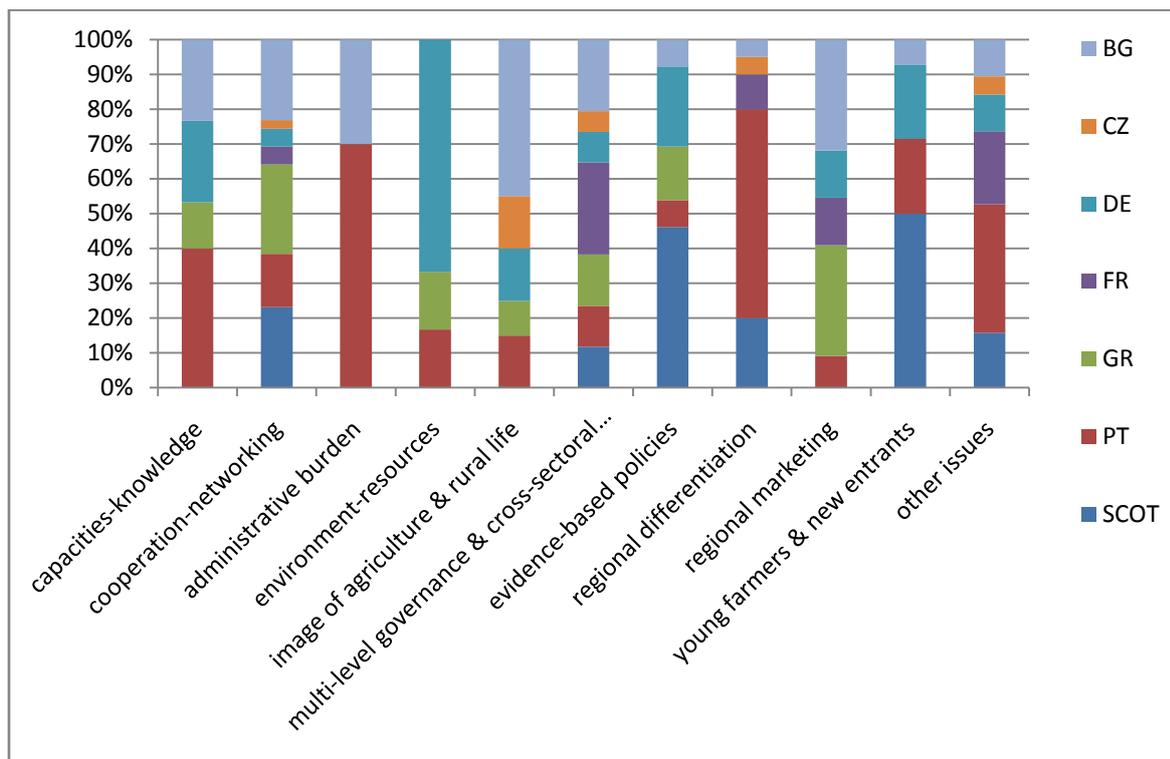


Figure 2: Shares of FarmPath study countries related to themes subject to recommendations

Source: Own calculation based on WP6 national Reports (T6.8)

Regarding the **policy dimensions** ('polity', 'policy' and 'politics') as introduced in section 2.2, the content-related 'policy' dimension is by far most addressed by the recommendations formulated (69%). For the purpose of this analysis, recommendations were allocated to this category that refer to strategies, policies and measures as well as the whole of the policy cycle beyond that (i.e. problem identification, implementation, evaluation). The 'polity' dimension is the second most covered dimension, accounting for 19%. It includes concerns that belong to the sphere of **institutional** frameworks and governance structures. Third, the 'politics' dimension is addressed by 10% of recommendations. For the purpose of this analysis, recommendations regarding communication and participation processes were allocated to this dimension (cp **Figure 3**).

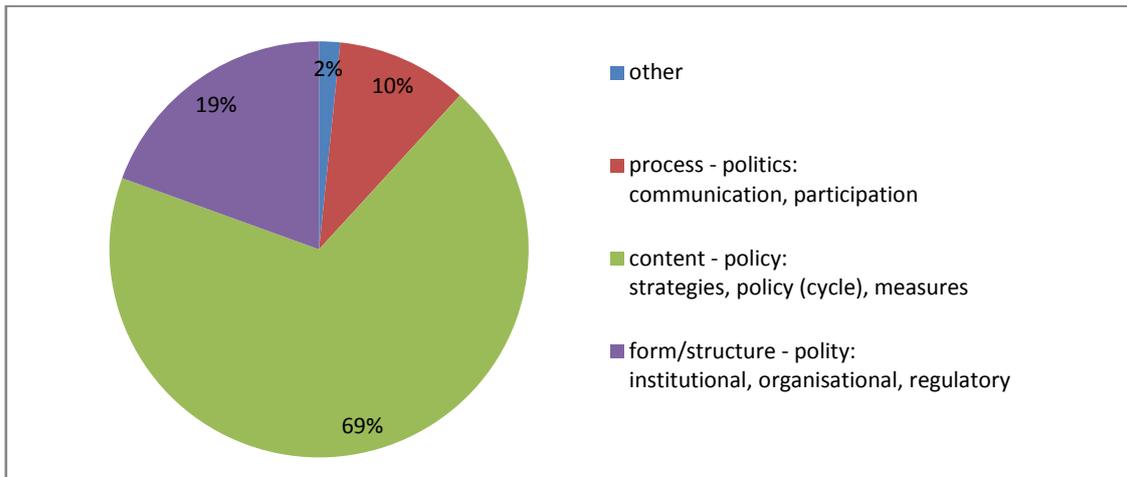


Figure 3: Shares of types of activity recommended across all FarmPath study countries (N=247)
Source: Own calculation based on WP6 national Reports (T6.8)

Relating the policy dimensions to the FarmPath study countries, the content-related ‘policy’ dimension predominates in all countries’ recommendations. Furthermore, all three dimensions are covered by the recommendations from all seven countries, albeit with varying shares (cp **Figure 4**).

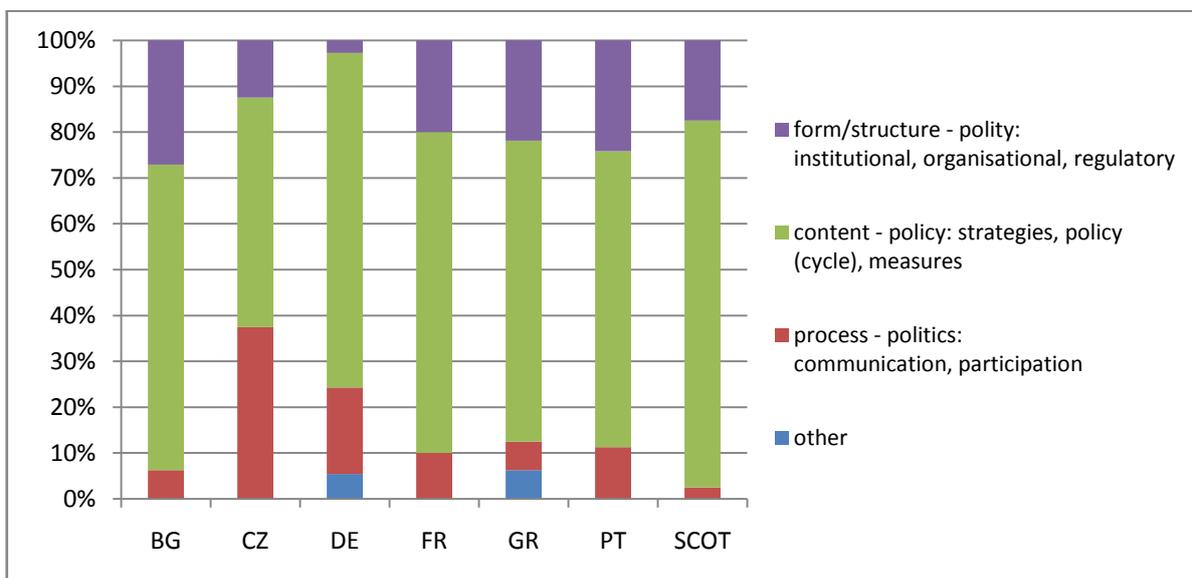


Figure 4: Shares of types of activity recommended by FarmPath study countries
Source: Own calculation based on WP6 national Reports (T6.8)

When looking at how the three policy dimensions relate to the ten themes, again the policy dimension predominates. This applies especially to evidence-based policies (theme 7), which per se refers to this dimension (however, one ‘polity’-related recommendation can be found here as well). The theme related to which the largest ‘politics’ share can be found is image of agriculture and rural life (theme 5), which is due to recommendations regarding communication and campaigns. The largest

shares of recommendations addressing the structure-related ‘polity’ dimension can be found under Cooperation/networking (theme 2), Multi-level governance/cross-sectoral coordination (theme 6) and Regional marketing (theme 9). Again, this is self-evident with regard to the themes’ contents (cp **Figure 5**).

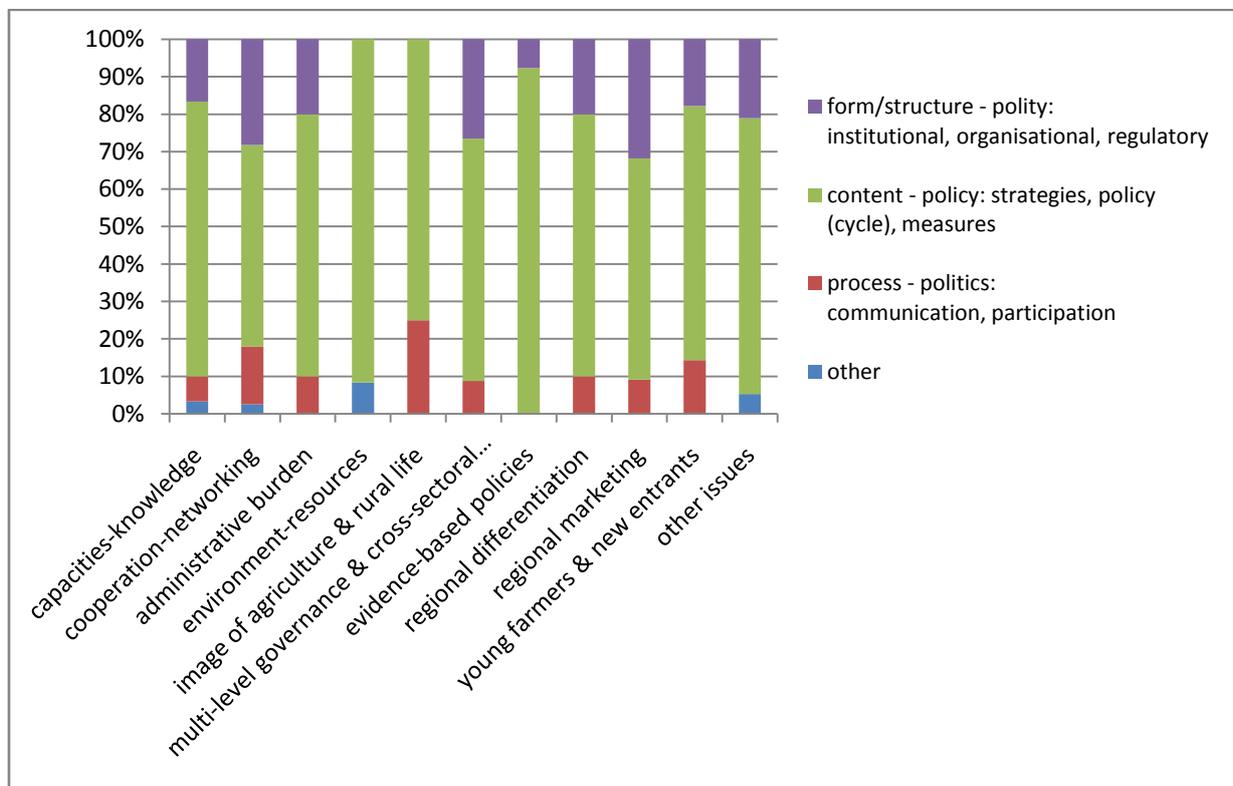


Figure 5: Shares of types of activity recommended by themes subject to recommendations
Source: Own calculation based on WP6 national Reports (T6.8)

In the sections below specific information on each of the ten themes is provided.

3.2.1 *Enabling innovation: building capacities and knowledge infrastructure*

The theme addresses individual and collective learning as well as access to knowledge as important for the development and application of innovations, whether technical or social, and for farm businesses’ viability and their contribution to sustainable development. Furthermore, the financing and focus of applied agricultural research and accessibility of results is tackled.

The share of recommendations targeting capacity building and knowledge infrastructure related to the total number of recommendations formulated for all seven study countries is ca. 12% (cp **Figure 1**).

Recommendations that can be mainly categorized as addressing capacity building and knowledge infrastructure are represented in Germany as well as all three southern European study countries Bulgaria, Greece and Portugal (cp **Figure 2**). Correspondingly, in the WP6 national reports of these four countries recommendations addressing this issue are named among the recommendations most relevant from the countries’ perspectives (cp **Table 4**).

3.2.2 *Enabling cooperation and networking*

Within the scope of this theme, the relevance of cooperation and actor networks for innovation, e.g. in terms of joint farmers' marketing initiatives, is addressed. In the former communist countries studied within FarmPath, i.e. Bulgaria and the Czech Republic, lack of trust among farmers due to collectivism experiences was identified as a specific hindering factor.

The share of recommendations addressing cooperation and networking related to the total number of recommendations formulated for all seven study countries is ca. 16% (cp **Figure 1**).

Recommendations that can be mainly categorized as addressing cooperation and networking are represented in all seven FarmPath study countries (cp **Figure 2**). In the WP6 national reports, Germany and Scotland as well as Bulgaria and Portugal list recommendations belonging to this issue among the most relevant ones from the countries' perspectives (cp **Table 4**).

3.2.3 *Reducing the administrative burden on farmers*

Administrative burden on farmers was identified in terms of shortcomings in institutional arrangements and unfavourable advisor-farmer relations with administrative staff lacking overview of farmers' practice situation.

The share of recommendations addressing administrative burden related to the total number of recommendations formulated for all seven study countries is ca. 4% (cp **Figure 1**).

Recommendations that can be mainly categorized as addressing the administrative burden of farmers are represented in the southern European countries Bulgaria and Portugal (cp **Figure 2**). In line with this, the Bulgarian and Portuguese WP6 national reports name recommendations belonging to this issue among the most relevant ones from the countries' perspectives (cp **Table 4**).

3.2.4 *Enabling environment-friendly and resource-efficient farming*

The theme points to the impact of farming on ecological sustainability, but at the same time to the wider need for integrated approaches to business valuation, allowing for all three sustainability dimensions.

The share of recommendations addressing environment-friendly and resource-efficient farming related to the total number of recommendations formulated for all seven study countries is ca. 5% (cp **Figure 1**).

Recommendations that can be mainly categorized as addressing environment-friendly and resource-efficient farming are represented for the largest part in Germany, but also in Greece and Portugal (cp **Figure 2**). Of these countries, Germany and Greece name recommendations belonging to this issue among the most relevant ones from the countries' perspectives (cp **Table 4**).

3.2.5 *Improving the image of agriculture and rural life in society*

The theme spans the low societal prestige of farming and associated undervaluation of farming's achievements, including non-commodity outputs. Beyond agricultural concerns, the situation of rural areas as a whole is addressed, including particular infrastructure needs; commonalities between southern European countries (Bulgaria and Greece) can be identified in terms of rural infrastructure needs. Related to this is the call for a more integrated approach to rural development allowing for the interrelations of various aspects such as public health, climate, lack of employment and an ageing rural population.

The share of recommendations addressing the societal image of agriculture and rural life related to the total number of recommendations formulated for all seven study countries is ca. 8% (cp **Figure 1**).

Recommendations that can be mainly categorized as addressing the image of agriculture and rural life in society are represented in all FarmPath study countries except France and Scotland (cp **Figure 2**). New entrant countries Bulgaria and the Czech Republic in their WP6 national reports name recommendations belonging to this issue among the most relevant ones from the countries' perspectives (cp **Table 4**).

3.2.6 *Multi-level governance and cross-sectoral coordinated strategies for sustainable development*

Under this headline, lack of effective multi-level governance and cross-sectoral coordination of strategies and policies is concentrated on. However, an integrated approach is crucial for regional sustainability of agriculture.

The share of recommendations addressing multi-level governance and cross-sectoral coordinated strategies related to the total number of recommendations formulated for all seven study countries is ca. 14% (cp **Figure 1**).

Recommendations that can be mainly categorized as addressing multi-level governance and cross-sectoral coordinated strategies for sustainable development are represented in all seven FarmPath study countries (cp **Figure 2**). In correspondence with this, recommendations belonging to this issue are named among the most relevant ones from all countries' perspectives (WP6 national reports) (cp **Table 4**).

3.2.7 *Increasing the evidence base of policies*

The theme addresses the importance of monitoring and evaluation with regard to ensuring a balanced impact of policies and actions regarding all dimensions of sustainability. A more evidence-based policy-making, allowing for the adaptive part of the policy cycle, is advocated.

The share of recommendations addressing evidence-based policies related to the total number of recommendations formulated for all seven study countries is ca. 5% (cp **Figure 1**).

Recommendations that can be mainly categorized as addressing an increased evidence base of policies are represented in all FarmPath study countries except the Czech Republic and France (cp **Figure 2**). Such recommendations are included among the most relevant ones by Germany, Portugal and Scotland in their WP6 national reports (cp **Table 4**).

3.2.8 *Encouraging regional differentiation*

The theme concentrates on the lacking differentiation between the regional and local levels, as well as the absence of measures allowing for specific situations and needs. At this, participatory approaches were found to be underdeveloped throughout the policy cycle.

The share of recommendations addressing regional differentiation related to the total number of recommendations formulated for all seven study countries is ca. 8% (cp **Figure 1**).

Recommendations that can be mainly categorized as addressing regional differentiation are represented in all FarmPath study countries except Greece and Germany (cp **Figure 2**). Corresponding recommendations are named among the most relevant ones in the WP6 national reports of the Czech Republic and France as well as Bulgaria and Portugal (cp **Table 4**).

3.2.9 *Enabling regional marketing approaches for economically viable farming*

Within the scope of this theme, improving the framework conditions for the marketing of agricultural products is tackled, including aspects such as lack of consumers' information and trust, limited marketing channels and strategies.

The share of recommendations addressing regional marketing related to the total number of recommendations formulated for all seven study countries is ca. 9% (cp **Figure 1**).

Recommendations that can be mainly categorized as addressing regional marketing approaches are represented in all FarmPath study countries except the Czech Republic and Scotland (cp **Figure 2**). Southern European countries Bulgaria and Greece include recommendations belonging to this issue among the most relevant ones from the countries' perspectives in their WP6 national reports (cp **Table 4**).

3.2.10 *Specific measures to support young farmers and new entrants*

The cross-cutting theme of young farmers and new entrants into agriculture is addressed against the background of inadequate and incoherent definition of the two as target groups of policies, necessary support for the often small farms held by these groups, an improved societal image of agriculture in order to make farm succession and entering the sector more attractive, as well as a need for enhanced education.

The share of recommendations addressing support for young farmers and new entrants related to the total number of recommendations formulated for all seven study countries is ca. 11% (cp **Figure 1**).

Recommendations that can be mainly categorized as addressing support for young farmers and new entrants are represented in Bulgaria, Germany, Portugal and Scotland (cp **Figure 2**). The latter three countries name corresponding recommendations among the most relevant ones from the countries' perspectives (WP6 national reports) (cp **Table 4**).

Table 4: Overview of the themes of FarmPath recommendations: relevance and policy dimensions referred to

Theme	Quantitative and qualitative relevance				Policy dimensions referred to			
	Share related to total recommendations (frequency, %)		FarmPath countries with recommendations on this theme	FarmPath countries where listed among the main recommendations	Structure – ‘polity’	Content – ‘policy’	Process – ‘politics’	Other
(1) Enabling innovation: building capacities and knowledge infrastructure	30	12%	BG, DE, GR, PT	BG, DE, GR, PT	X	X	X	X
(2) Enabling cooperation and networking	39	16%	all	BG, DE, PT, SCOT	X	X	X	X
(3) Reducing the administrative burden on farmers	10	4%	BG, PT	BG, PT	X	X	X	
(4) Enabling environment-friendly and resource-efficient farming	12	5%	DE, GR, PT	DE, GR		X		X
(5) Improving the image of agriculture and rural life in society	20	8%	BG, CZ, DE, GR, PT	BG, CZ		X	X	
(6) Multi-level governance & cross-sectoral coordinated strategies for sustainable development	34	14%	all	all	X	X	X	
(7) Increasing the evidence base of policies	13	5%	BG, DE, GR, PT, SCOT	DE, PT, SCOT	X	X		
(8) Encouraging regional differentiation	20	8%	BG, CZ, FR, PT, SCOT	BG, CZ, FR, PT	X	X	X	
(9) Enabling regional marketing approaches for economically viable farming	22	9%	BG, DE, FR, GR, PT	BG, GR	X	X	X	
(10) Specific measures to support young farmers and new entrants	28	11%	BG, DE, PT, SCOT	DE, PT, SCOT	X	X	X	
(11) Other issues	19	8%	BG, CZ, DE, FR, PT, SCOT	none	X	X		X
Total	247¹⁴	100%						

Source: Own compilation based on WP6 national Reports (T6.8)

¹⁴ Sub-recommendations were counted as individual recommendations.

3.3 Summary of main results

The recommendations developed within the framework of WP6 are (beyond WP6 work) based on the results of the preceding WPs 3-5. At this, the relevance of each of the three WPs as a source differed between countries.

The transdisciplinary approach applied within the scope of work with the NSPGs as well as the WP5 and WP6 workshops was associated with benefits as well as challenges related to (1) the preparatory phase, (2) the process of actual transdisciplinary work, and (3) the results (regarding participants' expectations as well as assessment from the researchers' point of view). Challenges were faced mostly regarding the latter two. In terms of a cross-national comparison, similar benefits and challenges were identified by the seven research teams. Some differences relate e.g. to the recruitment phase, where it was harder in some countries than others to motivate participants, as was discussed among the teams outside the WP6 national reports – owing e.g. to a different prestige of scientific work (relatively lower in DE, higher in PT) as a factor making participation more or less attractive in the various countries. Contacts to potential participants from previous work and building on existing negotiation processes were reported to have facilitated work (BG, FR).

The seven FarmPath research teams developed a large range of recommendations covering the ecological, social, economic and institutional dimensions of sustainability. These recommendations can be allocated to ten themes. Often several levels – i.e. actors at which level are proposed to become active – are addressed at the same time, and this holds also true for the types of actors addressed (e.g. EC directorates-general, national ministries, municipal authorities, professional organizations, consumers etc.).

In terms of a cross-national comparison, regarding the recommendations on 'cooperation and networking' (theme 2), in the former communist countries of Bulgaria and the Czech Republic, lack of trust among farmers due to collectivism experiences was identified as a specific hindering factor. In the recommendations themes of 'administrative burden' (theme 3) and 'rural life' etc. (theme 5), partly commonalities between southern European countries (Bulgaria, Greece and Portugal) can be identified in terms of rural infrastructure needs and shortcomings in organizational setup of farm advisory services.

Regarding the relevance of recommendations (i.e. the themes identified), on the one hand the quantitative – albeit only rough – analysis (percentage share of themes, number of study countries for which recommendations were formulated on a specific theme) allows some conclusions. This can on the other hand be complemented by qualitative information whether national FarmPath teams name recommendations addressing a certain theme to be among the main recommendations. Taken these three aspects together – highest percentage share, highest number of study countries represented, and named among the main recommendations – the following four top-ranking themes can be identified:

- **Enabling innovation: building capacities and knowledge infrastructure** (theme 1): accounting for a share of 12% of the total recommendations, four study countries represented, and named among the main recommendations also by four study countries.
- **Enabling cooperation and networking** (theme 2): accounting for a share of 16% of the total recommendations, all seven study countries represented, and named among the main recommendations by four study countries.
- **Multi-level governance and cross-sectoral coordinated strategies for sustainable development** (theme 6): accounting for a share of 14% of the total recommendations, all

seven study countries represented, and named among the main recommendations also by all study countries.

- **Encouraging regional differentiation** (theme 8): accounting for a smaller share than the above themes (8% of the total recommendations), but five study countries represented, and named among the main recommendations by four countries.

In a transition theory perspective, the crucial role of theme 2 on enabling cooperation and networking for niche innovations is underlined by the notion that ‘network anchoring, simply defined as changes in the network of actors who produce, use or develop the novelty [...] could be considered the primary means in which the agency of actors is considered’ (Sutherland et al., forthcoming). Theme 1 on enabling innovation is closely related to this.

Theme 6 (multi-level governance and cross-sectoral coordination) and theme 8 (regional differentiation) point to the role of policy for niche development and transition processes against the background of the challenges associated with the multi-level framework of the European Union (cp section 2.1).

Regarding the three dimensions of ‘polity’, ‘policy’ and ‘politics’, the content-related ‘policy’ dimension is by far most addressed by the recommendations formulated. This is in line with the results of the WP6 national-level desktop policy analyses, identifying ‘policy’ as the dimension with the highest need for action.

4 MAIN LESSONS LEARNED

Based on the results presented in the report at hand, the following main lessons can be highlighted:

- National strategies and policies in the seven FarmPath study countries address the sustainability dimensions to varying degree and cover only partial aspects of the sustainability of agriculture. At this, the imbalance between the sustainability dimensions does not mean that a specific dimension, e.g. the economic one, dominates; rather, the focus differs between individual strategies and policies, not allowing for an integrated sustainability approach.
- Looking at the three dimensions of ‘polity’, ‘policy’ and ‘politics’, the ‘policy’ dimension, including the whole policy cycle, is in focus in the national-level desktop analyses of the policy framework, owing to shortcomings in strategies’ and policies’ thematic targeting, implementation and impact. This corresponds to the fact that the content-related ‘policy’ dimension is the one by far most addressed by the recommendations formulated.
- Of the ten themes of FarmPath recommendations, the four most relevant ones in quantitative as well as qualitative terms identified are (by order of theme number): Enabling innovation: building capacities and knowledge infrastructure (theme 1), Enabling cooperation and networking (theme 2), Multi-level governance and cross-sectoral coordinated strategies for sustainable development (theme 6), and Encouraging regional differentiation (theme 8).
- In methodological terms, a general challenge identified was to provide recommendations that are context-specific and can be generalized at the same time. Using a range of diverse sources (WP3 case studies, WP4 and WP6 desktop analyses, WP5 and WP6 workshops) on the one hand created a broad basis for formulating recommendations, on the other hand posed the challenge to adequately balance and integrate these results. In spite of these challenges, the project succeeded in generating regionally specific as well as overarching recommendations.

- A specific methodological lesson was learned with regard to the transdisciplinary approach applied (NSPG, WP5 and WP6). Motivating potential participants and maintaining their engagement throughout the process (this applies especially to the NSPG and WP5 participants who were asked for a medium- to long-term involvement) proved very important. With regard to the results of transdisciplinary work it became apparent that the balancing of researchers' and stakeholders' views in order to allow for the objective of co-construction is a demanding process.
- Looking at the objectives named in the FarmPath Description of Work¹⁵, best-practice approaches to institutional and governance structures for enabling transition at regional level, and options for social and technological investment were identified within the scope of WP6 as far as possible. These results are included in the FarmPath policy brief on 'Regional sustainability of agriculture: adapting institutions and policies to enable transition'. Another objective was to relate recommendations to European supra-regions (in the case of the FarmPath study countries, a differentiation between western, central and southern Europe). Regarding some issues the specific situation of Bulgaria and the Czech Republic as new entrant states becomes apparent and is accordingly highlighted in the presentation of results where applicable. Partly commonalities between southern EU countries (Bulgaria, Greece and Portugal) can be identified in terms of rural infrastructure needs and shortcomings in organizational setup of farm advisory services. Besides this, findings are rather heterogeneous, with no region-specific patterns to be identified for western Europe (France and Scotland), central Europe (the Czech Republic and Germany) and southern Europe (Bulgaria, Greece and Portugal).
- In terms of demand for further research arising from the FarmPath project, two issues can be named that were addressed in the recommendations across several of the ten themes, but were not pursued in-depth and did not form separate themes themselves: First, the specific needs of small farms, associated with the concerns of young farmers and new entrants, due to the fact that they often manage smaller farms. Small farms are also addressed within the thematic field of marketing because of their size-related difficulty to comply with existing regulations. Second, the thematic field of food and nutrition arises within the context of several recommendations' themes as well, ranging from school curricula in order to enhance societal recognition and awareness of the role of agriculture for food provision, to alternative ways of securing protein supply.

¹⁵ FarmPath Description of Work, p. 19 ff. of workplan table

5 REFERENCES

The report at hand is based on the following FarmPath documents:

- WP6 National Policy Analysis and Recommendations Reports (T6.8; national authors: **BG**: Plamen Mishev, Mariya Peneva, Nedka Ivanova, Yanka Kazakova; **CZ**: Lukas Zagata, Katerina Boukalova, Jiri Hrabak, Michal Lostak; **DE**: Sarah Peter, Simone Schiller; **FR**: Catherine Darrot, Marion Diaz, Cyril Bigot; **GR**: Emi Tsakalou, George Vlahos; **PT**: Cecília Fonseca, Teresa Pinto-Correia; **SCOT**: Kirsty Holstead, Annie McKee, Gerald Schwarz, Lee-Ann Sutherland, 2013)
- Regional sustainability of agriculture: adapting institutions and policies to enable transition. Policy implications of FarmPath (Farming Transitions: Pathways Towards Regional Sustainability of Agriculture in Europe), an EU-funded project providing insights from seven EU countries. Policy brief (T6.11, D6.2; collaborative authorship of FarmPath fieldwork teams, 2013)
- Desktop analysis of EU policy framework, FarmPath WP6 working document (T6.2; authors: Simone Schiller and Sarah Peter, 2013)
- Draft policy analysis working document, FarmPath WP6 working document (author: Simone Schiller, 2012)
- Annex I ('Description of Work') to the FarmPath Consortium Agreement (FarmPath consortium, 2011)
- FarmPath Glossary (WP2) (compiled by Ika Darnhofer and amended as needed between 2012 and 2013)

Other sources used:

- Elzen, B., van Mierlo, B., and Leeuwis, C. (2012): Anchoring of innovations: Assessing Dutch efforts to harvest energy from glasshouses. *Environmental Innovations and Societal Transitions* 5, 1-18
- Prittitz, V. von (2011): Mehrdimensionale Politikanalyse (*Multi-dimensional policy analysis*), (last accessed 8 February 2014 at: http://www.volkervonprittitz.de/mehrdimensionale_politikanalyse_september.pdf)
- Sutherland, L.-A., Zagata, L. and Wilson, G.A.: Conclusions, in: Lee-Ann Sutherland, Ika Darnhofer, Geoff Wilson and Lukas Zagata (eds.): Transition pathways towards sustainability in agriculture: case studies from Europe, CABI Publishers (forthcoming)

6 ANNEX

6.1 Overview of FarmPath work packages

The FarmPath project comprises the following work packages:

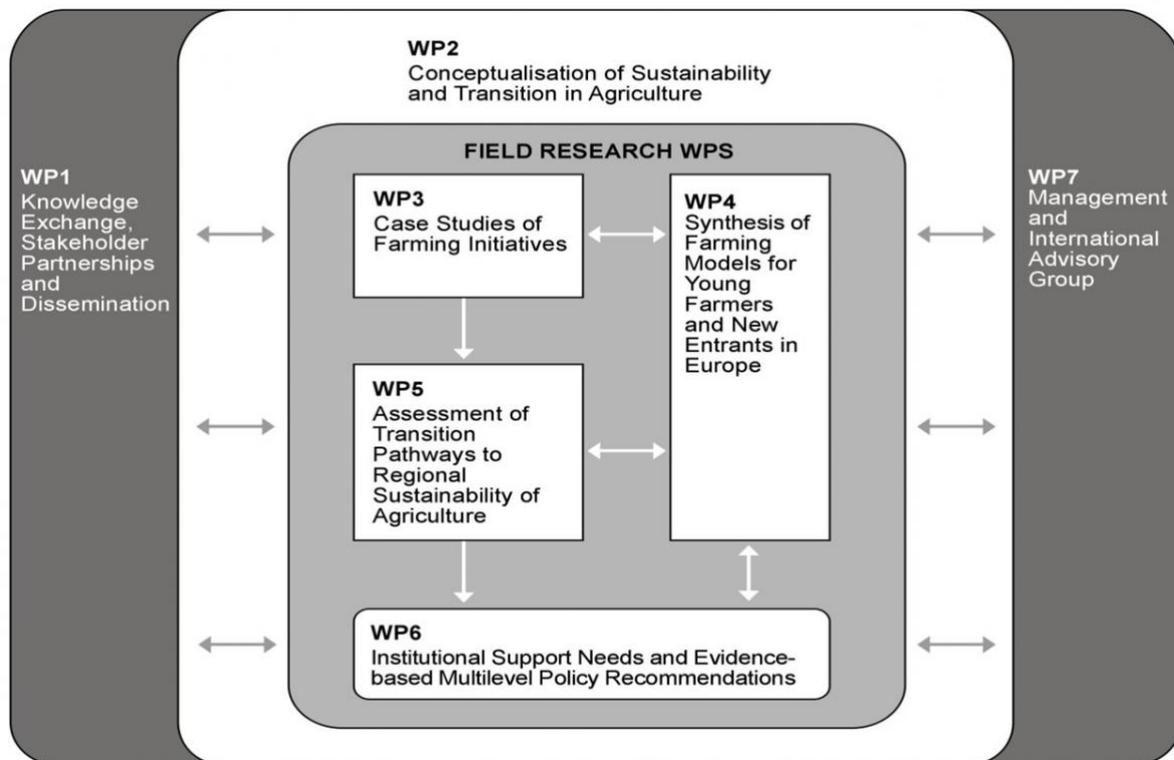


Figure 6: FarmPath work packages and their interrelations

6.2 Definition of terms

In line with the glossary¹⁶ of key terms, elaborated as a ‘living document’ of reference for FarmPath analysis, the following definitions provide the basis for the terms used within the context of the report at hand:

actors: A conceptual term referring to people, organizations, networks. Actors are defined by their ability to act purposefully. Through the identification of actors, stakeholders can be identified.

case studies: A method of organizing empirical research. ‘Case study’ is the field research method by which we are researching the initiatives.

clusters: In FarmPath we have grouped initiatives into clusters, which broadly address the key process studied that is changed in a fundamental way in the emerging transitions. There are seven clusters: renewable energy production; lifestyle farming, certification programmes, collaboration in agriculture, local food systems, high nature value farming, reducing the environmental impact of farming.

¹⁶ Compiled by Ika Darnhofer (WP2) and amended as needed between 2012 and 2013.

collaboration: To work together, to produce or achieve something. In FarmPath (esp. in relation to Cluster 4 'collaboration in agriculture') this term is preferred over 'cooperation' to avoid confusion with the 'farm cooperative' as a specific organizational form, and with vertical/horizontal cooperation between businesses (the distinction is also important as in German and in Portuguese there are stronger differences between the two terms than in English).

governance: It refers to the steering and ruling of society and the way in which citizens and groups articulate their interests, mediate their differences, and exercise their legal rights and obligations. Governance usually refers to a new type of government, one which is less based on hierarchy and more on networks. It is thus linked to a decrease in the use of command-and-control approaches, in favour of participatory approaches such as brokerage and negotiations. These changes are often linked with a decrease in the role of governments in steering societal change, and an increase in the role of civil society and the private sector.

The European Commission established its own concept of governance in the White Paper on European Governance, in which the term "European governance" refers to the rules, processes and behaviour that affect the way in which powers are exercised at European level, particularly as regards openness, participation, accountability, effectiveness and coherence. These five "principles of good governance" reinforce those of subsidiarity and proportionality.

initiatives: Conceptually smaller than a →niche. An emerging transition (i.e. a niche engaged in the 'take-off' phase of a transition) that is being studied as part of the empirical work in WP3. In FarmPath there are 21 initiatives studied (three initiatives in each of the seven countries). These 21 initiatives are grouped into seven clusters.

innovations, social and technological: While innovations are often understood as new technologies developed based on scientific research, this is only one type of innovation. Another type are social innovations, which often emerge bottom-up. Examples would be farmers seeking new forms of organization (e.g. machinery rings rather than individual mechanization) or new forms of connection to consumers (e.g. direct marketing). Also, social and technological innovations are often linked, as many technological innovations have social implications (e.g. the ubiquity of the internet has changed the way people (esp. the young) communicate and interact; or the way in which the internet enabled a new form of direct marketing).

institutional arrangements: A set of rules and procedures that structure social interaction by constraining and enabling actors' behaviour. Institutional arrangements may be formal or informal, and include agreements, networks and organizational structures both within agencies and between agencies. They include the way power related to decision-making is delegated, distributed or shared. Institutional arrangements are simultaneously shaped at local, regional and (inter)national level, and mutually influence each other within a framework of complex interlinkages and strategic feedbacks. Institutions include e.g., social norms, customs, law (e.g. property rights) and legal system, economic institutions such as markets.

key informants: Informed, knowledgeable people who were involved in FarmPath (e.g. for interviews; participants in the focus groups and scenario workshops), but who are *not* members of the National Stakeholder Partnership Groups. They were selected to represent the views and interests of various stakeholders or due to their particular knowledge of the initiatives. [Based on the level of their involvement in FarmPath we distinguish between →stakeholders, →key informants and →NSPG]

landscape, socio-technical: In the Multi-Level Perspective of transition studies, it designates the long-term, exogenous trends at the macro-level which influence the regime (e.g. demographic trends, political ideologies, societal values, climate change, globalization). These trends may exert pressures on the regime. In FarmPath we always refer to the 'socio-technical landscape' to distinguish it from the geophysical / cultural landscape (see definition below).

landscape: An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors. It mostly refers to the territorial and spatial dimension of a geographical area, combining its geophysical properties and the human occupation. In FarmPath we differentiate this

(usual) meaning of the term 'landscape' from the →'socio-technical landscape' used in the Multi-Level Perspective within transition studies.

new entrants: A new entrant is an aspirant who tries to break into farming. A new entrant is a person or organization acquiring ownership or occupancy of agricultural land for the first time in their own right, whether through succession, purchase or contractual agreement of whatever form.

niche: Term used in the Multi-Level Perspective of transition studies to indicate the locus of radical innovations. A niche is usually made up of a small group of actors, usually at the local level, which work on radical innovations. Niche activities usually include articulation of visions, building social networks and developing processes or business models. They are usually the seedling of a transition, although many of these 'seedlings' perish. In FarmPath the initiatives are mostly at the niche level, but they are already engaged in the 'take-off' phase, i.e. engage with →regime actors to initiate institutional and structural changes.

National Stakeholder Partnership Group (NSPG): In each country, one NSPG has been formed, which meets regularly with the FarmPath researchers. These NSPG are a key aspect of the participatory processes in FarmPath. Such participatory processes allow to adequately address the legitimate multiple viewpoints as well as the uncertainty inherent in emerging transitions. [Based on the level of their involvement in FarmPath we distinguish between →stakeholders, →key informants and →NSPG]

policies: A policy is the content-related dimension of politics (e.g. environmental policy, health policy). It is a macro-level framework, based on a formal document (e.g. the Common Agricultural Policy). From a European perspective, policy is the collection of activities and legislation intended to achieve EC aims in specific fields of activity. [conceptually, it is hierarchically lower than →strategy]

regime: Term used in the Multi-Level Perspective of transition studies for the dominant social paradigms and rule sets that guide developments, as well as tangible elements such as networks, structures, practices and regulations, infrastructures, technological artefacts. The elements of the regime are characterised by being fairly stable over time, i.e. a regime is characterised by lock-in, with a high commitment to 'business as usual'. Innovation occurs incrementally with small adjustments accumulating into stable trajectories. There is both alignment and tension within a regime. The *incumbent regime* designates the regime before it is affected by the pressure from one or several niches; the *emergent regime* designates the regime in the process of transformation through the pressure from niches.

In FarmPath a regime is defined in relation to the societal function it fulfils (see definition of 'function'). The framing of the research question relative to each initiative or cluster will influence the definition of the respective regime (i.e. societal function and boundaries). This definition should be made reflexively, as it will inevitably have implications for the stakeholders to be included, and thus the framing of problems and scenarios. When studying a regime, it might be helpful to distinguish between subsystems which address specific processes involved in fulfilling the human need (e.g. agricultural production, food processing and retail, policy making).

regional: →Landscape and spatialized social relations that shape cultural identities. In FarmPath the region is seen as roughly the size of a NUTS 3 level, to ensure fairly homogenous biophysical and socio-cultural characteristics. However, an administrative delimitation may not always be practical for the initiatives studied in FarmPath, nor for the regional scenarios. Indeed, what constitutes a region is necessarily socially constructed and negotiated. In FarmPath the region will thus build on what the NSPG and/or key informants consider a socially relevant spatial entity. This delimitation will ensure that actors and processes that need to be included to understand the transition are included, without the region being larger than necessary.

stakeholders: People who are affected by the initiative or the transition studied in FarmPath, but who are not personally/directly involved in FarmPath. The various stakeholder groups are identified (e.g. through members of the NSPG or key informants), to ensure their interests and views are represented at the scenario workshops. [Based on the level of their involvement in FarmPath we distinguish between →stakeholders, →key informants and →NSPG]

strategies: Higher level than →policy (e.g. rural development strategies, national sustainability strategies, EU growth strategy - EU2020).

sustainability of agriculture: There is a general consensus that sustainability implies three dimensions: economic, ecologic and social (some authors add a fourth dimension: institutional). However, there are vastly different narratives to operationalize what this means, and each promotes specific remedies as desirable to avoid various threats and use opportunities. Consequently, sustainability of agriculture has become an ambiguous concept – even a contentious one. In line with the co-evolutionary and systemic theoretical framework underlying FarmPath, we do not assume that technical means will be sufficient to achieve sustainability. Instead, a transition is needed, which implies a systemic change. Innovations for sustainability thus question the dominant agro-food regime, i.e. the current meanings, values and structures (e.g. extension system, research, agri-business, retailers). (In FarmPath the use of ‘sustainability of agriculture’ rather than ‘sustainable agriculture’ is selected to indicate that it’s a process, not a fixed state).

sustainability of agriculture, regional: In FarmPath we propose **that** contributing towards the regional sustainability of agriculture is best achieved by enabling flexible combinations of models and approaches to farming. These models and approaches vary to reflect the specific opportunity sets embedded in regional culture, agro-ecology, local knowledge, social networks, infrastructure, governance structures etc. Regional sustainability is a quality of the regional farming system that emerges from adaptive processes by members of the agricultural production and consumption network, who respond to the changing needs and preferences of consumers and citizens. It builds on diversity, cooperation and learning between a wide range of stakeholders. The regional sustainability of agriculture is built on a dynamic mix of farming models, so that farming remains attuned to the resources and needs of the region.

In FarmPath, the identification of the transition paths for the regional sustainability of agriculture is the result of a co-construction involving the multiple relevant stakeholders, within a stepwise scenario work. This is in line with the AKIS approach, where social learning based on co-research relations among various stakeholders is the basis for innovations that increase sustainability (i.e. for niches that lead to a transition).

transition to sustainability: Transitions are not assessed in a value-neutral way, but based on a normative goal: enhancing the sustainability of a society. In FarmPath, sustainability is not taken as achieving a pre-defined set of values for selected criteria, but is socially negotiated and regionally adapted. The aim of the initiatives studied in FarmPath are to influence the regional models and approaches to farming towards a transition into a more sustainable direction, i.e. to address situations identified as problematic/unsustainable by the regional stakeholders. Given that any change might have negative side-effects, care will also be taken to assess the potential negative impacts of the initiatives on regional sustainability.

transition: It is a radical, fundamental change at the regime level (as opposed to incremental change which adapts but do not transform the regime). Such a transition emerges from a succession of systemic changes over a long time period (e.g. 25-50 years); it incorporates processes of societal, ecological, economic, cultural, technological and institutional co-evolution. A transition is surrounded by great uncertainty and complexity. A transition implies a system innovation (as opposed to a series of technical additions), i.e. it not only involves new paradigms, rule sets and cultural meanings, but also new technologies, markets, market relations, user practices, regulations and infrastructures.

visions: Developed in participant workshop are ‘wishable’ or ‘desirable’ futures (may or may not be sustainable futures depending on the definition of sustainable, and no formal assessment, although various aspects covered). Term ‘vision’ selected over ‘scenarios’ as the latter is well defined in the literature, and the process in FarmPath differs.

young farmers: Young farmers can be defined in two ways: (1) those, who are under 40 years of age, possess adequate occupational skills, set up an agricultural holding for the first time and are the head of the holding. This is the definition used in the regulation on support for rural development; (2) Eurostat views young farmers as those who are below the age of 35. The latter approach is often used in the debate on ageing population of farmers in Europe, since it provides quantitative facts.