



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

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Assessment of Transition Pathways to Regional Sustainability of Agriculture

WP5 Synthesis Report

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Content

| | |
|---|-----------|
| EXECUTIVE SUMMARY | 3 |
| 1 INTRODUCTION..... | 4 |
| 2 THE ANALYTICAL FRAMEWORK..... | 5 |
| 2.1 THE ROLE OF SCENARIO PROCESSES | 5 |
| 2.2 TYPES OF SCENARIO APPROACHES | 6 |
| 2.3 SCENARIO PROCESS ADOPTED IN FARMPATH | 7 |
| 3 THE CASE STUDIES AND THE STEP BY STEP VISIONING PROCESS..... | 8 |
| 4 THE VISIONS..... | 11 |
| 4.1 OUTLOOK OF THE CONSTRUCTED VISIONS ACROSS EUROPE..... | 11 |
| 5 PATHWAYS | 14 |
| 5.1 MAINTENANCE OR RE-EMERGENCE OF FARMING ACTIVITIES | 14 |
| 5.2 INNOVATION IN FARMING..... | 15 |
| 5.3 NEW CONCEPTS OF FARMING, FARMERS AND RURAL AREAS..... | 15 |
| 5.4 OVERALL POLICY AND INSTITUTIONAL ARRANGEMENTS..... | 16 |
| 6 CONCLUDING REMARKS | 17 |
| 7 REFERENCES..... | 19 |
| 8 ANNEX | 21 |
| 8.1 PROTOCOL FOR GETTING IN TOUCH STEP | 21 |
| 8.2 PROTOCOL FOR DEVISING THE VISIONS..... | 24 |
| 8.3 PROTOCOL FOR VISIONS COMPILATION | 28 |
| 8.4 PROTOCOL FOR THE WORKSHOP - PATHWAYS TO REACH THE VISIONS | 29 |

List of figures

Figure 1: Scenarios can help address uncertainty in complex systems. 5
Figure 2: Different approaches in studies exploring the future..... 6
Figure 3: The step-by-step approach 8

List of tables

Table 1: Vision typologies and key points of each vision created in each case study 13
Table 2: Example of pathways defined regarding the maintenance or re-emergence of farming activities..... 14
Table 3: Example of pathways defined regarding innovation in farming. 15
Table 4: Example of pathways defined regarding new concepts of farming, farmers and rural areas.15
Table 5: Example of pathways defined regarding new concepts of farming, farmers and rural areas.16

EXECUTIVE SUMMARY

This report synthesizes the main findings of the 7 cases (Bulgaria, The Czech Republic, France, Germany, Greece, Portugal and the United Kingdom) that were been studied in FarmPath Work package 5 “Assessment of Transition Pathways to Regional Sustainability of Agriculture” (WP5).

The goals of WP5 were to undertake participatory identification of multiple future transition pathways to sustainable agriculture at regional level, through stakeholder scenario development exercises. Results of WP5 have been summarized in a Handbook titled: Facilitating Sustainability of Agriculture at Regional Level- Principles and Case Studies from across Europe.

More than 50 visions have been gathered across the seven European regions. These results have been grouped in three main typologies: 1) intensification of production, neo-productivism, farming competitiveness and profitability, 2) farming centered on a conservation agenda, landscape and natural resources quality as desired outcomes and 3) Lively countryside with rural communities, networks and close connections between the urban and the rural. Not all regions have produced one vision within one of these groups. Some regions only produced two visions, and some others produced more than one vision in one of the groups. Furthermore, it may be considered that many visions have elements of all three groups.

After the discussion of what needs to be done so that the desirable visions can be reached, outcomes were grouped in four main categories of pathways: 1) innovation in farming, 2) maintenance or re-emergence of farming activities, 3) new concepts of farming, farmers, and rural areas and 4) overall policy and institutional arrangements needed.

The diversity of identified pathways points to the need for truly contextualized intervention and action, adapted to the characteristics and needs of each region, if sustainable futures are to be achieved. In such a diversified rural Europe, this outcome could be anticipated, but still it is striking. Constrained by international agreements and European policy making, together with the growing globalization of markets and models, the margin for flexible regulations and tailor-made solutions is increasingly small. The results show that the opposite is considered to be necessary, that in fact specific solutions and combined actions are required for sustainable pathways.

1 INTRODUCTION

This report synthesizes the main findings of the 7 cases that were been studied in FarmPath Workpackage 5 “Assessment of Transition Pathways to Regional Sustainability of Agriculture”. This research was undertaken in seven countries (Bulgaria, The Czech Republic, France, Germany, Greece, Portugal and the United Kingdom), from July 2012 to December 2013. The goals of WP5 were to undertake participatory identification of multiple future transition pathways to sustainable agriculture at regional level, through stakeholder scenario development exercises in seven different regions of Europe, and typifying these pathways when the participatory process in all seven regions was completed. The work of WP5 builds on findings from WP3 (Case Studies of Farming Initiatives).

The aim of this WP is to building on findings from WP3 to inform participatory identification of multiple future transition pathways to sustainable agriculture at regional level, typifying both pathways and regions identified through stakeholder scenario development exercises,

- further develop the FarmPath conceptual framework in relation to concepts of ‘transition pathways’ and ‘regional sustainability of agriculture’
- identify a set of pathways and visions for sustainable agriculture, which reflect both regional differences and social and technological innovation needs to attaining these visions
- assess how possible institutional arrangements, support measures and socio-technical networks amongst actors within the farming community, policy, technology and wider society can lead to increased regional sustainability of agriculture
- development of a handbook for assessment of agricultural sustainability at regional level, and identification of possible future transition pathways
- provide an overall analysis of transition pathways towards regional sustainability of agriculture in Europe. WP5 process was structured as a participatory process, to allow the involvement of participants in this discussion and identification, leading to a higher level of awareness on possible transition pathways for their region.

Results of WP5 have been summarized in a handbook for enabling agricultural sustainability at regional level titled: Facilitating Sustainability of Agriculture at Regional Level Principles and Case Studies from across Europe This document is targeted to decision makers and policy managers that may influence processes towards increased regional sustainability of agriculture – at local and regional levels across Europe.

The current report is structured to follow the sequence in which the research was conducted. The ‘rationale’ of the construction of the analytical framework is addressed in the first section. In the second section the seven case studies are presented very briefly, as well as, the step-by-step visioning process. Then, drawing on concepts from transition management, the visions and pathways are discussed. The report is completed with some concluding remarks.

2 THE ANALYTICAL FRAMEWORK

The participatory identification of multiple visions for regional agriculture in WP5 was undertaken through a scenario-building exercise. Scenarios can be considered to be tools for “ordering one’s perceptions about alternative futures” through constructions of “internally consistent views of what the future might turn out to be” (Ramos 2010). They are usually best used by making comparisons across a set of different scenarios.

2.1 The role of scenario processes

Scenario-based approaches are particularly useful when addressing the considerable uncertainty about future trajectories in complex systems (Figure 1) - here, uncertainty may arise from a system's complexity itself, or may be related to determining future developments (Zurek and Henrichs 2007). Scenarios have shown to be relevant tools for improving communication amongst stakeholders, planners and decision-makers, enabling stakeholders to reflect about the future and in this way contribute to rural planning and sustainable governance (Tress and Tress 2003; Carvalho-Ribeiro et al. 2010; Southern et al. 2011). In cases of relatively low uncertainty with regard to determining developments, scenarios allow the projection of future implications (often these then involve reference scenarios, sometimes with alternative projections around these). Alternatively, if large questions exist on how driving forces may play out (especially in the longer-term future), scenarios help exploring the implications of a range of different futures (commonly this results in sets of contrasting scenarios that outline a realm of plausible futures). Often this makes it necessary to reduce the complexity of systems before analyzing them, either by looking only at parts of a system or by focusing on a very concrete focal question in the scenario process.

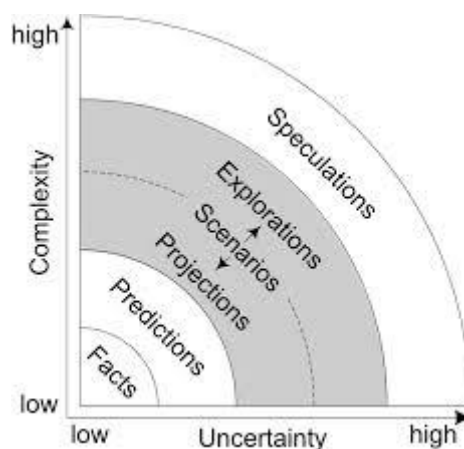


Figure 1: Scenarios can help address uncertainty in complex systems.

Source: Zurek and Henrichs (2007)

Scenarios present, simply put, stories about the future, which can be told either qualitatively (in words or pictures), quantitatively (as numerical estimates) or by combining both (Zurek and Henrichs 2007). To address the way a complex system may develop, scenarios bring together different elements and combine them to develop images of the future. These elements usually include a number of focal questions (i.e. regarding the main uncertainties) a scenario is built around, a set of driving forces that shape the system's developments, the basic overarching logic and decision-making paradigm portrayed in each scenario, as well as an elaboration of future outcomes that may be of interest to the scenario users (Zurek and Henrichs 2007).

2.2 Types of scenario approaches

Two very broad approaches in constructing scenarios may be identified (Ramos 2008):

‘La prospective’, the French school, initiated by Gaston Berger and Hughes de Jouvenel and, currently, Godet (1993) – which depart from a vision of the future and explore the ways in which this future may take place. Here, the focus is on identifying how a desired situation may be reached – a strategic planning dimension gains relevance.

The ‘Intuitive Logics School’, in line with Schwartz (1996) and van der Heijden (1996) – which prioritizes scenarios departing from the present and explore ways and tendencies for the future. Here, the construction of alternative futures’ process dimension gains relevance, in which individuals’ experience and perception is highlighted.

To address the multiple nature of scenarios’ conceptual frames, Ramos (2008) proposes three main approaches in studies exploring the future, based in three types of questions (Figure 2): “what may happen”, “what will happen”, and “what should happen” (Wright and Spers 2006).

“What will happen” question does not allow much freedom of choice regarding the future, since it presupposes structural continuity. Prediction is extrapolative in nature and has as main tool model simulation, to which statistic probability based on past and current data is associated. This type of modeling explores tendencies to forecast future events or tries to make the future visible through what-if scenarios.



Figure 2: Different approaches in studies exploring the future

Source: Ramos (2008)

“What may happen” question is typically approached by exploratory scenarios and investigates structural discontinuities. These discontinuities are rather difficult to describe quantitatively and exploratory scenarios tend to be strictly qualitative. The exploratory scenario construction is different from previsions, projections or preferences, since it does not attribute any value do the scenarios (bet-

ter/worse, more/less desirable or probable). Instead, it simply formulates credible histories about what may happen.

“What should happen” question is considered in normative scenarios, or prescriptive, anticipatory scenarios. In this kind of scenarios the departure point is a pre-defined future, from which pathways towards it are considered and searched for, in a process called ‘backcasting’.

FarmPath followed a process-based approach to sustainability of agricultural systems, seen as an ongoing, adaptive process of enabling farming households and members of the agricultural production and consumption chains to respond to the changing needs and preferences of consumers and citizens, through flexible combinations of farming models and provision of a suite of public goods and agricultural functions at regional level. Sustainability cannot be a static objective (Rammel et al. 2007).

2.3 Scenario process adopted in FarmPath

In FarmPath it was important therefore to focus on visions about where to go, and on the transition pathways that may lead us towards it. As such, in the scenario exercise we drew mainly on the last two approaches to future, exploratory and normative approaches, with a clear dominance of the last.

The qualitative versus quantitative nature of scenarios was also a relevant issue. Although many scenario exercises dealing with agriculture and land use/cover patterns in Europe combine deliberately quantitative and qualitative approaches – e.g., PRELUDE, EURURALIS, SCENAR 2020 or FORESCENE (see Ramos 2008) – by merging expert knowledge with the use of modeling procedures, following, for instance, the “story-and-simulation” approach; it is the qualitative nature of explorative scenarios, nevertheless, that makes them apt to deal with more complex issues and longer timeframes and, thereby, differentiates this approach from predictions, forecasts or projections (Ramos 2010). This makes it possible to deal with pathways ‘discontinuity’ and with missing quantitative data and makes it possible to bring together the ‘world of facts’ and the ‘world of perception’, thus gaining insight on how the world works and how factors may reorganize in the creation of the future (Ramos 2010). For this reason we emphasized in the qualitative dimension of scenarios.

In FarmPath, to do justice to the complexity and multidimensional character of choices, the assessment of alternative options was a participatory process (Chilvers 2009; Plummer 2009). Only through participatory processes is it possible to adequately address the legitimate multiple viewpoints as well as the uncertainty inherent in the alternative systems and alternative pathways to these systems (Darnhofer and Loibl 2007; Kemp and Martens 2007; De La Vega-Leinert et al. 2009; Delgado et al. 2009).

An important step was to envision sustainable futures and identify related transition pathways, using transdisciplinary research (in-depth analysis in Pinto-Correia et al., 2014) and involving stakeholders directly in the research process. As such, a strong participatory component, as well as the practical utility of the end product (the Handbook), were the guiding principles of this WP.

3 THE CASE STUDIES AND THE STEP BY STEP VISIONING PROCESS

A step-by-step approach (Fig. 3) based on participatory methodologies and transdisciplinarity was developed. Each step of the approach included a protocol (in annex) that was replicated in selected regions in the seven partner countries: Aberdeenshire (North East Scotland), Plzensky region (Czech Republic), Baden-Württemberg (Germany), Montermor-o-Novo (Portugal), Pays de Rennes (France), Prazardjik and Plovid (Bulgaria) and Imathia (Greece). The overall goal was to convene a representative group of rural interests, including researchers and those involved in land management and agriculture, to answer to two central and sequential questions:

- 1) What is wished for agriculture and other land- based activities for each region in 2030?
- 2) What needs to be done to achieve this desirable future in 2030?

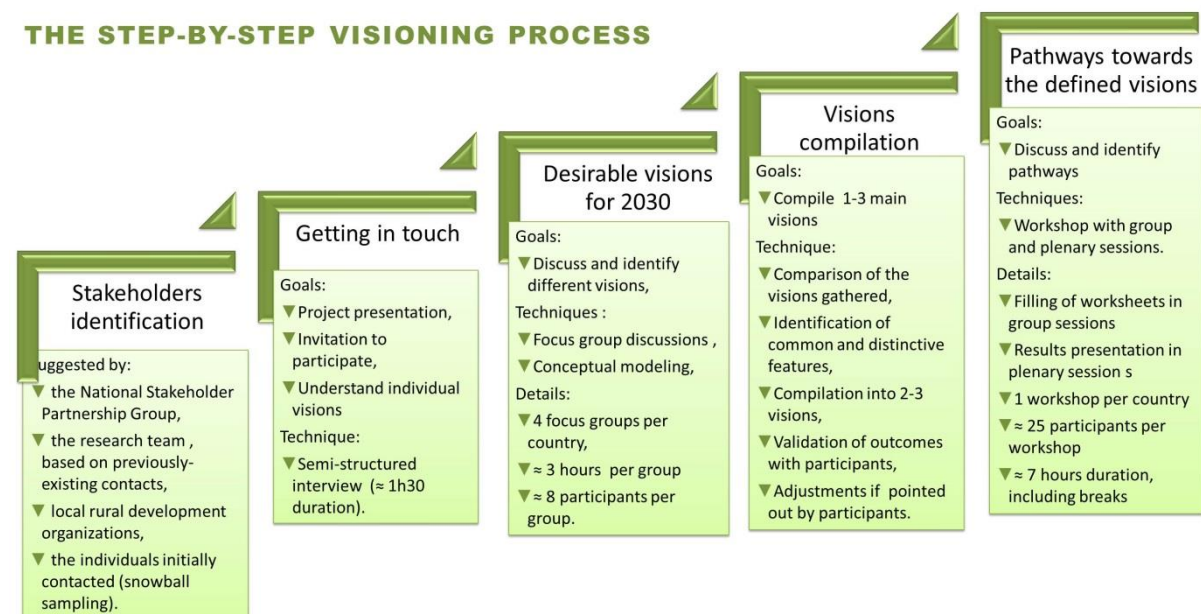


Figure 3: The step-by-step approach dedicated to understand the desirable futures of agriculture and other land-based activities in 7 regions along Europe in 2030, as well as, the pathways to reach those visions.

The selection of stakeholders to be involved was based on the following typology:

- Official Interests (OI): Individuals dedicated to governmental and non-governmental activities related with rural issues: environmental organizations, farmers organizations, other established NGOs, business associations, unions, local authorities, national policy makers, etc.
- Run the Land (RL): people acting upon the policies, though managing the land, therefore including farmers and land owners, hobby farmers, businesses associated with agricultural production, those responsible for protected areas, etc.
- Young Farmers (YF): Farmers under 40 years of age, who possess adequate occupational skills to set up an agricultural holding for the first time and are the head of the holding. This definition follows the one used in the EU rural development regulation. YF could be aggregated in the group RL, but a separation was intentional for assessing if age and accumulated experience in farming would generate different perspectives.
- Those who Benefit from the Land (BL): End users, recreationists, health-related charities, community well-being and educational practitioners, social care, residential associations, consumer organizations, etc.

Following typology definition, several strategies were used to identify the individuals within each group: a) suggestions from the National Stakeholder Partnership Group (NSPG) of each country, b) identification by the research team based on previously-existing stakeholder networks, c) identification through local rural development organizations and d) suggestions from the individuals initially contacted (snowball sampling).

The “get in touch” step (Fig.1) occurred between January-February 2013 and it is the phase where participants have been recruited (50 per country). The target was to confirm the engagement of eight participants per typology (OI, RL, BL and YF), who were motivated and accepted to participate in the following steps. Initial contact with participants included a face-to face conversation where FarmPath objectives were presented, as well as the structure of the approach (Fig. 1), and what was required from the participants (i.e. participation in two meetings and the validation of results by phone or email). For those individuals accepting to participate, initial contact was followed by a semi-structured interview to better understand each participant’s background and their individual wishes for agriculture and other land based activities for 2030, in the study region. Within this recruitment stage, we requested that participants select an object that represented their vision and to bring it to the next step of the approach.

The “desirable visions for 2030” step (Fig.1) were designed around focus group discussions considering wishes for agriculture and other land-based activities, for each region, in 2030. In each region, four focus groups discussions were held during February-March 2013, following the typology previously identified: OI, RL, BL and YF. Segregating one typology per focus group was done for several reasons: 1) to have a better idea of the common and divergent points between groups, 2) to facilitate the discussion due to the expectation of similar ‘wishes’ between groups and 3) for the smoother introduction of participants and FarmPath researchers to participatory methodologies since each focus group was organized with a maximum of eight participants.

The exercise was based on systems thinking and conceptual modelling (Guimarães et al., 2013) to allow a structured discussion and ensure that all dimensions of the question were covered. With the information provided by the participants during the recruitment stage, a list of features representing their individual visions was developed. The first task of the focus group was the consensual selection of the most relevant features for the vision for 2030. After this selection, participants were invited to draw the group vision by linking features using arrows with a verbal identification of the process that relates them (e.g. products, impacts, increases, etc). Participants were encouraged to add drawings or sentences that would help them explain the vision created. Subsequently an overall discussion was promoted, leading most often to two visions in each focus group.

Following this step, the research team in each country analysed the focus group visions in terms of similarities and divergent points (the “visions compilation” step, Fig.1), compiling two to three visions, which were then validated with participants through email, phone or face-to-face presentation of results.

The step-by-step approach culminated in a final workshop for the definition of pathways to achieve the previously defined visions. The workshop included plenary sessions and group discussions. The main goal was the co-construction of pathways between participants from the different typologies, members of the NSPG and FarmPath researchers. In some regions experts on specific topics were also invited to the workshop to provide insights considered relevant, due to lack of consensus or knowledge during the focus group. Information on previous FarmPath results and the region characteristics and current situation was provided in a document sent to participants a week before the workshop. This additional information aimed to ensure that the pathways defined would be innovative, but also realistic.

After the workshop the pathways obtained were analysed by the research team and furthered discussed with the NSPG, with a final report sent to all participants.

Both the focus group discussions and the workshop were supported by professional facilitators, so that FarmPath researchers could engage in the discussions promoted and be participants of the process. In some cases, the facilitation was done by one member of the research team, but the others engaged in the discussions.

4 THE VISIONS

More than 50 visions about the wishes for agriculture and other land-based activities in 2030 were gathered, across the seven European regions. Their main topics are summarized in Table 1. Even considering the large differentiation of the regions considered, there are many similarities in the way these visions can be grouped, when we grasp their main focus. There are also fundamental differences, which can be partly explained by the particularities of the regional context.

One group of visions may be summarised as the intensification of production, neo-productivism, farming competitiveness and profitability. Within these visions environmental constraints are expressed, but the focus is on farming production and productivism as a key strategy.

Another group of visions relates to farming, but is centred on the environmental or conservation agenda, with the quality of the landscape and of the environment or natural resources as an expression of the wished outcomes.

Finally, a third group of visions focuses on rural communities, a lively countryside, networks and close connections between the urban and the rural, emphasising strongly the reinforcement of rural values and lifestyle.

Not all regions have produced one vision within one of these groups. Some regions only produced two visions, and some others produced more than one vision in one of the groups. Furthermore, many visions have elements of all three groups. For this reason table 1 lines and collums do not combine in some cases. For instance in Aberdeenshire region one visions includes features of two categories and its description is done under two collums. On Baden-Württemberg region the three visions created fall in one of the categories described hence in table 1 collums are alined. In general, community is seen as a source of strength and differentiation of the countryside, thus the social dimension, appears to be the driver for at least one vision in all the regions considered; therefore the most commonly shared ideal for the future.

4.1 Outlook of the constructed visions across Europe

In the Czech Republic for example, one vision entitled “Agriculture for the countryside”, stresses cooperation and networking amongst farmers, and another “Lively Countryside”, emphasises multi-functionality and a diversified community. Therefore both visions in this region centred on rural communities.

The Bulgarian case is an exception, as all three visions aim for intensification, modernisation and specialisation. One vision is more ‘environmentally friendly’, but all remain within the group of visions that centre on neo-productivism. This particular focus in Bulgaria can be related to the relatively low level of agricultural modernisation in the country, or to a shared concern regarding the competitiveness of farming and food production.

In Portugal, the two visions shaped may be categorised in the groups described above, however, they both have the Montado as a central condition for future sustainability. The Montado is the extensive silvo-pastoral land use system characteristic of Southern Portugal, and in both visions its maintenance is considered as fundamental.

In Scotland three visions were compiled. One vision is focus if retaining rural population based on connecting communities so that rural areas became more appealing for people to reside. Another vision is centered on farm profitability and economically viability for the farming sector and to achieve

this three main themes have been identified: 1) profits will be derived from the market, without production subsidies, 2) farm businesses are diversified and 3) farming will embrace technology, in towards a more efficient use of inputs. The remaining visions is based on the maintainance of a diverse landscape that is well managed, flexible and dynamic in its land use.

In France two visions were found. One vision describes a rural area with small farms, production diversification including vegetable production. Alternative market channels are used including farm markets and cooperative organization. The industries are micro and include energy production while the farmlands are preserved. The other visions wants to achieve the same goals but with a strategy based on big farms including breeding and dairy productions. Competitiveness is the main focus achieve by a strong agro-processing sector targeting exportation, as well as, local food supply chain, energy production and farmlands preservation.

In Greece three visions were described. One vision implies the development of agriculture in the region in all production sectors such as arboriculture, viticulture, annual crops, as well as, livestock. Another vision suggests the modernization of agriculture in the region understood as a professionalization of the sector, with direct assess to subsidies and other benefits as investment aids. Planning is done with aid of spatial planning tools that help the allocation of diferent farmings activities in proper areas. Specialised crop zones with clustered fields and farms in the plains and modernized livestock in semi mountainous zones.

In Germany two visions have been created. One focused on agricultural enterprise that is both competitive and environment-friendly. The other vision is centered on the human being as the key to sustainability by individual self-responsibility.

Table 1: Vision typologies and key points of each vision created in each case study

| | Vision typologies and key points of each vision created | | | |
|--|---|---|--|---|
| CASE STUDIES | Intensification of production, neo-productivism, farming competitiveness and profitability | Farming centred on a conservation agenda, landscape and natural resources quality as desired outcomes | | Lively countryside with rural communities, networks and close connections between the urban and the rural. Strong reinforcement of rural values and lifestyle |
| Aberdeenshire (North East Scotland) | Farm resilience based on profitability, related to market but also to public payments for non-market goods, including the real costs of production when respecting environmental standards. | Food security through a 'local' focus where food production is maximised, re-connecting people with the land and producers; farm businesses are diversified. Environmentally friendly practices and reduced reliance on fossil fuels. Countryside quality preserved. | | Connected communities and closer networks between the urban and the rural. Innovative housing design and improved infrastructures, fitting the needs of the rural population. |
| Plzensky region (Czech Republic) | The core is food production and economic viable agriculture supporting local development. Protection of domestic market and higher social status of farming due to food quality. | Broad spectrum of rural activities that keep countryside viable and prosperous. Prominence of small scale production and rural tourism; Targeting sustainability of cultural landscape. | | Strong social and local dimension that draws not only on the cooperation between farmers, but also on direct support of rural living; to small family farms and young farmers. |
| Baden-Württemberg (Germany) | Agricultural enterprises that allows 'regional competitiveness' and 'environment-friendly management'; Intelligent use of energy and renewable energy production. | Cultural landscape is central and there is an improved societal appreciation of agriculture. Longer-term policy thinking secures economic viability | | The human being is at the centre, associated with the central aspects of 'sustainability' and 'individual self-responsibility'. Closer relation between society and agriculture. |
| Montermor-o-Novo (Portugal) | Intensification of the production to ensure the economic viability of the agriculture. The Montado system is safeguarded, but the focus is in the increase technological capacities for more intensive farming and the rationalization of production. The rural identity is significantly altered by new farm styles. | | Preserve the Montado agro-silvo-pastoral system and the intrinsic rural values. Creation of a region trademark that requires: change of mind-set, cooperation between actors, strategic plan and training, and resulting in stronger identity | |
| Pays de Rennes (France) | Large competitive farms, dairy farms, and agro-processing sector managed by several associated farmers. Farmlands preserved from the city spread and good relationship between citizens living in the city and farmers. | Small farms, diversification of production and rural activities, alternative market channels, cooperative organisation, micro-industry, energy production. | | |
| Pazardjik and Plovdiv (Bulgaria) | Economic efficiency respecting the minimum environmental requirements; new technologies and maximum of the resources use; targeting quantity and quality of agro-products. | Specialization and intensification only for sites suitable for mechanization in crop production and animal breeding; Export-oriented sectors; industrial agricultural production at low cost | Economic efficiency is consistent with the nature and needs of the area; cooperation and interaction promote social cohesion, leading to initiatives for local brands development and direct marketing. The quality of rural life is improved. . | |
| Imathia (Greece) | Modernization and specialization of farming. The ultimate goal of the whole modernization process should be the establishment of a quality brand name for the products of the area | Development of agriculture in all production sectors, with emphasis on the protection of biodiversity and soil; natural resources considered key factors for agricultural production; Farmers' training and specialization; more collective forms of organisation. High quality products. | | Integrated rural development; environmental and landscape friendly spatial planning, combining protection of natural resources with rational forest conservation and cultural heritage management; better quality of life and sustainability of the region. |

5 PATHWAYS

The pathways required to achieve the visions defined in each case study reveal a much larger diversity of concerns. Although the discussions in the final workshop, in all regions, resulted in a large list of pathways, these can be summarised in the following themes: 1) Maintenance or re-emergence of farming activities (table 2) 2) Innovation in farming (table 3), 3) New concepts of farming, farmers and rural areas (table 4), and 4) Overall policy and institutional change (table 5).

A detailed description of the pathways can be obtained in the handbook of the project: [Facilitating Sustainability of Agriculture at Regional Level Principles and Case Studies from across Europe](#). The handbook also provides supporting evidences in order to demonstrate what actions are likely be successful (or otherwise). In some cases, the example illustrates the problem rather than the solution in an effort to clearly demonstrate the content of each pathways. The examples have been collected from the results obtained by WP3 where 21 farming initiative over Europe have been analysed and described.

Each of the above themes was divided in sub-themes. Here we provide one example of pathways defined per subtheme.

5.1 Maintenance or re-emergence of farming activities

The maintenance or re-emergence of farming activities means that regardless of the farming system there are certain features considered as essential to maintain, or re-activate the social and economic role of agriculture. Participants considered that these can be achieved through farming infrastructures and services, economic viability of farming activities, land and farming succession, and closer interconnections between farming, policy and research. Table 2 provides a list of pathways regarding this theme was divided in sub-themes.

Table 2: Example of pathways defined regarding the maintenance or re-emergence of farming activities.

| Maintenance or re-emergence of farming activities | |
|---|--|
| Sub-theme | Pathways example |
| Economic viability of farming activities | Promote the organization of local markets with local actors outside farming (public administration, non-farmers and so on), and link to other sectors (tourism, heritage, conservation). |
| Land availability and farming succession | Facilitate access to land to interested farmers and other users |
| Farming infrastructures and services | Keep or create local processing infrastructure in new flexible ways, that can facilitate their use by farmers and decrease public expenditure with maintenance costs. |

5.2 Innovation in farming

Innovation in farming, considered to be achieved through innovative mindsets and practices, concerns new techniques and technologies, practices and network connections, and all are considered necessary for the future sustainability of agriculture, and also for other land-based activities.

Table 3: Example of pathways defined regarding innovation in farming.

| Innovation in farming | |
|--|---|
| Sub-theme | Pathways example |
| Interconnection between farming, policy and research | More connection, for example through regular meetings and extension services, but also field work or field trips joining farmers, policy-makers and researchers |
| Innovative mindset | Creation of extension services with tailored and flexible services, instead of general solutions. |

5.3 New concepts of farming, farmers and rural areas

New concepts refer to the need to acknowledge the shift away from production as the sole driver of land use and rural dynamics, towards a complex interplay of other drivers, such as countryside consumption or landscape and nature conservation. In order to be successful, this multifunctional transition must be acknowledged, as well as all the actors involved. The conditions required for these new concepts to spread are reshaped relations between farming and the wider public, the attractiveness of rural areas, the trend for 'going local', i.e., for buying locally produced goods and being integrated in a local community, multifunctionality in farming and rural areas, and integrated actors and strategies.

Table 4: Example of pathways defined regarding new concepts of farming, farmers and rural areas.

| New concepts of farming, farmers and rural areas | |
|--|--|
| Sub-theme | Pathways example |
| Farming and society | Promote a shift in society's perception of farming and farmers towards more respect and appreciation. |
| Attractiveness of rural areas | Social, cultural, educational and health infrastructures should be kept in the rural areas, even with higher costs than in more central places. |
| Going Local | Increase awareness of consumer for the higher quality of local food and increase its consumption, particularly of products from small scale farms, linking these local products also to food sovereignty and environmental awareness. |
| Multifunctional rural areas and farming | Promote the coupling of farming systems with other profit producing activities like on-farm energy production, using for instance municipal waste, or rural tourism (linked to gastronomy, archaeology, wine, skiing), which is better organised and promoted. |
| Integrated actors and strategies | Promote the work of farmers with processing partners, organised in networks throughout the regions. They may share and manage common agro-industry infrastructures like in the micro-industry or crafts model. Collaboration between farmers and producers' groups brings about other advantages: more political intervention, less production costs and more quality of life. |

5.4 Overall policy and institutional arrangements

Policy and institutional arrangements are those conditions that must be established at macro level, framing the activities to be developed in rural areas. These arrangements correspond to the different sectors and the strategies defined for each of them, transferred into activities and legislation, at different scales. It has been considered these arrangements are best achieved through coherent policy-making, regulation, funding, institutions and global policy issues.

Table 5: Example of pathways defined regarding new concepts of farming, farmers and rural areas.

| Policy and institutional arrangements | |
|---------------------------------------|---|
| Sub-theme | Pathways example |
| Coherent policy-making | More bottom up approaches, including at EU level, assuring due coherency between different levels of policy making. |
| Regulation | Increase transparency regarding product origin through labelling |
| Funding | Tailored subsidy system supporting specific farming systems, which show the creation of positive environmental and social externalities. |
| Institutions | More efficient support from public administration services to setup new rural / farming activities. |
| Global policy issues | Create conditions to encourage the use of native seeds in each country. Regional pressure in this sense is needed, supported on rural development needs and maintenance of regional identity. |

6 CONCLUDING REMARKS

Over the past decade the transition towards increased sustainability of agriculture has been a central theme in the work of governments, NGOs and research institutions. It is becoming clear that changes are needed to ensure that agriculture in the EU can meet the increasing range of public goods and functions desired by its fellow citizens.

In FarmPath we have worked with the idea that sustainability of agriculture is best addressed at regional level, by enabling a variety of flexible combinations of farming models to represent the specific regional cultures, agricultural capabilities, diversification potential, ecology and historic ownership, and governance structures.

The definition of sustainability at regional level reflects a shift away from the notion that individual farms, or farming systems, can or should be expected to meet the full range of public and industry demands on agriculture. It accounts for the fact that there will be regional differences in the agricultural forms and capabilities. It also accepts that interactions between individual farm models and farming systems at the regional level are a key aspect of sustainability.

In order to move towards increased sustainability, transition needs to occur. This means that different developments at the local, regional and national level have to come together, which will lead to a development pathway based on new practices, technologies, knowledge, institutions, social organization and different guiding principles and values. These pathways can only be successfully identified through a process of a co-construction which involves all the relevant stakeholders.

The potential pathways identified by FarmPath provide institutional actors dealing with the creation of conditions for transition in rural areas with examples of how this could best be addressed. The synthesis of FarmPath case study research provided useful insights into the study of emergent transitions.

Grounded on concrete cases from seven European regions and on a participatory process involving regional stakeholders through “visioning” exercises, WP5 outcomes provides suggestion of how to:

- innovate in farming;
- maintain farming activities;
- support/ create a new concept of farming, farmers and rural areas.

Problems that can be transversal between regions across Europe have been identified, as well as pathways that may help move towards distinct visions of ‘sustainable agriculture’. In addition, means of addressing overall policy and institutional arrangements have also been identified.

The diversity of identified pathways seems to point to the need for truly contextualised intervention and action, adapted to the characteristics and needs of each region, if sustainable futures are to be achieved. In such a diversified rural Europe, this outcome could be anticipated, but still it is striking. Constrained by international agreements and European policy making, together with the growing globalization of markets and models, the margin for flexible regulations and tailor-made solutions is increasingly small. The results show that the opposite is considered to be necessary, that in fact specific solutions and combined actions are required for sustainable pathways.

Given the complexity and richness of the pathways identified, and comparing it to a less striking diversity in the visions formulated, the hypothesis can be formulated that the transdisciplinary approach set in place has played a role in the quality and deepness of the discussions and their outcomes. The interactions between different knowledge types that are relevant for each region lead to

the identification of pathways that are not just diverse and differentiated, but also have more chances of being well informed and placed within the realm of each context.

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8 ANNEX

8.1 PROTOCOL FOR GETTING IN TOUCH STEP

Get acquainted and build trust

Objectives:

- Select, contact and engage participants in WP5 process.
- Leave participants with the focal question for the visions development ‘What are your wishes for the future of agriculture and other land based activities in the region of [specify region] in 2030?’

Steps:

1. Select participants to enrol in WP5 exercise that represent the groups of stakeholders in the region selected for WP5 (Select 6-8 participants for each group):

Recommendations:

>> To be the most inclusive the possible, when identifying potential participants per group, refer to key informants that have been identified during the field work in WP3, if they exist.

>> Search for diversity also within each group: female and male, young and older people, people used to take part in this kind of processes and people less used to it, etc.

>> Consider people may give up along the process. So always try to identify 8 participants per group, not 6.

2. Once a participants’ list first proposal is formed, identify for each participant, based on previous investigations:
 - a. What drives the involvement of different participants?
 - b. How can you make what are you doing important to them? – be realistic.
3. Approach participants in informal one-to-one or small meetings of up to 3 people, according to what is easier. If possible, meet them at “their” place, or there where it is easy for them to meet you. Do not ask for them to travel to meet you, but travel yourself to meet them.
 - a. Be empathic. Be open and non-judgemental. Exercise LISTENING.
 - b. Explain the process and the participants’ role in detail, as an example:

“FarmPath is a project aiming to contribute to regional agriculture in [specify region]. To do so, we believe we need to involve many different people who represent the different dimensions of regional agriculture. This is how we came to you [specify the person who recommended this participant if this is the case]. We will be contacting several people from different backgrounds and institutions during this month, but always connected to the subject of what are the desirable futures for regional agriculture of [specify region].

After this period of initial contacts, when we have a group of people interested [specify the persons who you know the participant relates to AND the persons which are part of their participants group – whether they know each other or not], we will invite you for a first meeting, where together with this small group of participants we will ask you to formulate two visions that represent the futures you would like to see taking place in regional agriculture in [specify region]. This smaller meeting shall take place somewhere in February or March 2013.

[At this point do not refer to the short discussion that will take place at the end of this meeting, regarding the constraints that their visions may face, when the concept of sustainability will be introduced and presenting the NSPG sustainability criteria and indicators to the participants, for discus-

sion – this shall take place only after participants have devised their visions – at the end of the focus groups meetings]

Then we will invite you for a second meeting, this time with a larger group. It should be somewhere in May or June. The idea in this second meeting will be to discuss with a larger group how may we achieve some of the visions that all groups proposed [here, cite the participants from the other participant type groups, so that the participant is aware of who will he/she be interacting with along the process – make the process transparent from the start, ensure there is space for trust]. In this second meeting we will be able to discuss only some of the visions that will come out of all groups in the first meetings, as they will be many (around 8 or so), don't you agree? [the selection will be a critical moment so make sure the participant is comfortable and agrees with the cutting down that will be made, which results in excluding some visions, but is the only way we may detail pathways towards visions with many different people of the region] But because there is this need, we will contact you before the second meeting to see if you agree with the selection of visions. At this point we will also give you brief information about the region, its agriculture and more detail on the visions to be further discussed.

Would you be interested in getting involved in this work? This implies participating in these three moments: i) constructing visions in small workgroups in a first small meeting, ii) confirming you agree with the visions we will further discuss or adapting them and iii) developing, in a larger workgroup, the pathways that may lead us to those visions being a reality in the future. Is this interesting for you? [If not, why?] Would you be able to be present along the whole work? [stress the importance of participating in the whole work process, until the end]"

c. Try to explore in which ways can the team and the project be of interest or useful to the participant, bearing in mind the real possibilities outlined in step two – never promise what you can't fulfil: **"How can we help you? How can the project be more useful to you?"**

d. Use this first contact to collect information that will structure the devising of visions. We recommend the questions bellow and that you record the responses (audio) for later reference. The purpose of these questions is to: i) understand better the individual vision for 2030, ii) make participants familiar with the terminologies to be used and exercise proposed while providing them with time to assimilate and define their wishes for the future until the focus group meeting, iii) gather information to be used in devising the visions in advance of the focus group meeting – ensuring the latter is really dedicated to collectively building up their vision, not wasting time with understanding the terminology, the exercise, deciding about individual preferences.

e. Ask who the participant would further recommend to include in the process and consider this person(s) for potential contact (i.e., snowball sampling).

f. Explain the participant that as a preparation for next phase you would like to invite him/her to think about **'What are your wishes for the future of agriculture and other land based activities in the region of [specify region] in 2030?** To ensure the engagement in this reflecting exercise, invite the participant to select an object (might be a personal object, an image, a photo, a word, a plant, anything) in which the participant expresses his/her wishes for the future of agriculture in the region. The object purpose should help the participant: i) keep the focal question in mind and exercise this reflection; ii) present himself and express his/her relationship with the focal question at the focus group meeting. Leave a card with the focal question in written and the team's contacts.

4. In between this first approach and the next, keep the contact alive and build trust – phone, send e-mails,... – without overloading the participant! Always keep the focal question for the visions on the top of list.

Recommendations:

>> Back in the office, redefine the contacts list according to the contact recommendations obtained and when appropriate (e.g., the participant was clearly looking forward to see another participant

he/she recommended, included in the process) provide feedback to participants when contacts they recommended are not included, explaining why is it so. This may be done by phone.

>> Back in the office, look at the information you gathered and outline what is it that motivates the different participants and plan meetings and information exchange ensuring that **every time you will meet it will be worthwhile.**

>> **Don't start discussing pathways here** – this is primarily about getting people engaged, finding out what you can do for them, what they can get from this and introduce the planned scenario exercise process and what is their role in it. In introducing participants to the planned process, **there shouldn't be a reference to, nor an explanation of, sustainability** - regarding the project's objectives. Also, **we should use the term 'visions' and not 'scenarios'**. The important is to focus on a detailed explanation of the exercise process and the participants' role in it.

Questions to collect information in the first contact

The questions below aim to guide the conversation, but do not necessarily have to follow this specific order or formulation. The Farm-Path person can adapt the questions in order not to repeat him/herself and add new questions considered relevant. The questions and responses should if possible be recorded, after the participant gave permission for it. If this is not possible, take some notes during the conversation and complete them as soon as it is finished.

Participant:

Location:

Date:

1- Are you from here? Do you enjoy living here?

2- How about your job, do you like it? Have you always worked in this occupation/topic/job?

3- Do you relate to agriculture in any other way than your profession (if the profession is not related to agriculture)?

4-Imagine you have no limitations at all, what would you wish for the future of agriculture in the region, lets says in 20 years, in 2030? What is your dream - first thoughts, in short?

5-In this wishes can you identify 3 land covers, 3 Elements in the landscape and 3 social/ economic features of agricultural organization (expressed in one word/concept)? How about other aspects – can you identify 1 other issue that would describe your ideal future for agriculture in the region and is not include in the previous categories or lists?

| Land Cover | Elements in the landscape | Social/economic features of agricultural organization | Open issue |
|------------|---------------------------|---|------------|
| | | | |
| | | | |
| | | | |

Definitions:

Land cover – how the land is occupied, what you see in the land.

Elements in the landscape – is what you see in the land, besides the land cover: structures or punctual elements. They can be man-made or natural.

Social and Economic features of agricultural organization – regards all aspects, visible or invisible, which explain the desirable future functioning of agriculture and other land based activities.

Open Issues – regards aspects not considered in any of the previous categories but identified as important by the participant in describing a desirable future.

6-Where would you like to see this? (refer to the different landscapes / farm-structures in the region – in the Alentejo, Portugal, for example, this will be the big and the small property).

8.2 PROTOCOL FOR DEVISING THE VISIONS

Objectives:

- Build two agreed-upon visions per participant group.

Distribution of participants in the focus groups

In Phase 1 you have met the participants, presented FarmPath and the aim of the participatory process, invited them to think about visions (through a focal question¹ and object) and collected information concerning the elements which will structure and concretize the visions to be devised in group by 4 group types (6-8 participants for each group).

Organization of the focus group meetings

For each focus group the facilitation team should have two elements: the main facilitator and the redactor. The redactor will assume facilitation during part of the session. There will be one focus group meeting for each of the four group types above (6-8 participants in each meeting). During the vision creation, you should divide the participants in 2 sub-groups. This division enables better discussion by providing participants more time to express themselves.

The data gathered in the previous step will be the baseline information that will promote discussion for the creation of visions. In this way, synthesize it in a table to be placed at the wall during the focus group meeting, as well as printed and placed in each working table. Please refer to the table structure suggested in Annex 1. This table should be different for each focus group and should only include data from Phase 1 provided by the participants of that group type.

As soon as participants arrive they are distributed in two separate tables (Fig. 1). Their distribution is previously arranged and identified by a name tag. This pre-arranged grouping should be based on the knowledge about participants and the information collected in Phase 1. The team should arrange the sub-groups so that participants with potential affinities and visions are gathered, to increase the chances of getting two clearly distinct visions, one from each sub-group, and to ease the discussion.

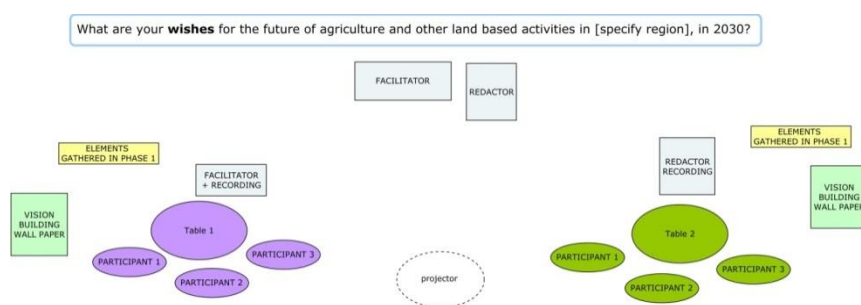


Figure 1: Room organization

during the first part of the focus group. There are 2 sub-groups that will be developing their vision for agriculture and other land based activities in 2030.

¹ What are your wishes for the future of agriculture and other land based activities in the region of [specify region] in 2030?

Each sub-group will have a wall paper to design their common vision and a poster with the synthesizing table of the data gathered in the previous step (and/or print-outs of the table) which can be used as a guideline for the exercise. The group will also have access to coloured post-its, pens, paper for drafting and for taking notes on the disagreement points (explained below).

The main question should be written in the wall so that it is always clear what the goal is. It is important that you always refer to the same question formulation. Don't be afraid to repeat the focal question, nor to emphasize that this exercise is about i) agriculture and other land based activities; ii) 2030; iii) a future for the whole region; and iv) what is wishable and not what is possible. All these dimensions are important for the success of the visions creation.

The facilitator will then provide the necessary explanations about the exercise and present the data gathered during the previous step using a presentation projected on the wall.

Explanations will include the image in Figure 2, as follows:

"We have gathered your individual wishes for the future of agriculture in the [specify region] region in 20 years' time, in 2030. This is based on what participants' wish for and not constrained by any other limitation or characteristic. It is not based on what you think is likely to happen, but on what you wish for.

All the information gathered is presented in this table [refer to the synthesizing table on the wall] and you can review and correct it in the printed document next to you. For the next 45 minutes we will ask you to build a joint vision, as a small group [one of the sub-groups]. So the challenge now will be to find a consensus vision. To do so, we invite you to look at the table in front of you and select the features with which you agree. You can select until 3 features for each category previously identified (land cover, elements in the land, social/economic features of agriculture organization and open issues) to build up your vision. If the group selects more than 3 features per category, then you need to choose the three most important.

If today you identify a feature that is not included in the list, you can also add it now and include it in your final selection. If a feature is in a category that the group does not agree with, you can change it to the category you find adequate.

If you find some divergent points between your view and the group, we invite you to take notes so that we can discuss it before lunch. However, always try to clarify the possible differences in viewpoints within the group since it might be just question of clarification rather than real differences in views.

You do not need to consider constraints which might not allow the achievement of a certain vision at this stage. Base your vision on what the group wants, desires for the future of this specific region, with its own specificities and characteristics.

You have paper on the table to take notes or to do drawings that might help you to express the group's vision. Furthermore, we ask you to draw the vision in the wall paper close to you. You can use any format to express the group vision: drawings, words, arrows connecting features, different colours, etc.. This is an example of a vision drawn in another project [Fig. 2 below, to be projected on the wall by the facilitator]. With this we want to provide an example of ways to express the group vision, but you are free to express yours in whatever shapes you find adequate.

To be sure that you choose from each category, they are identified in different colours. So after the features are selected you should write them in the post-its with the corresponding colour. As in this image, you can link different features with an arrow or other drawing and write or draw what the linkage (arrow, draw) means, or just explain in any other ways why are the 2 features linked. You can

also make a cluster of features, as in this example. Drawings can also be added. The main idea is to express your group vision in a visual way that helps summarize it and communicate.

When each group achieves a consensual vision, a spokesperson (chosen by the group) will be asked to explain the group's vision for everyone in the room."

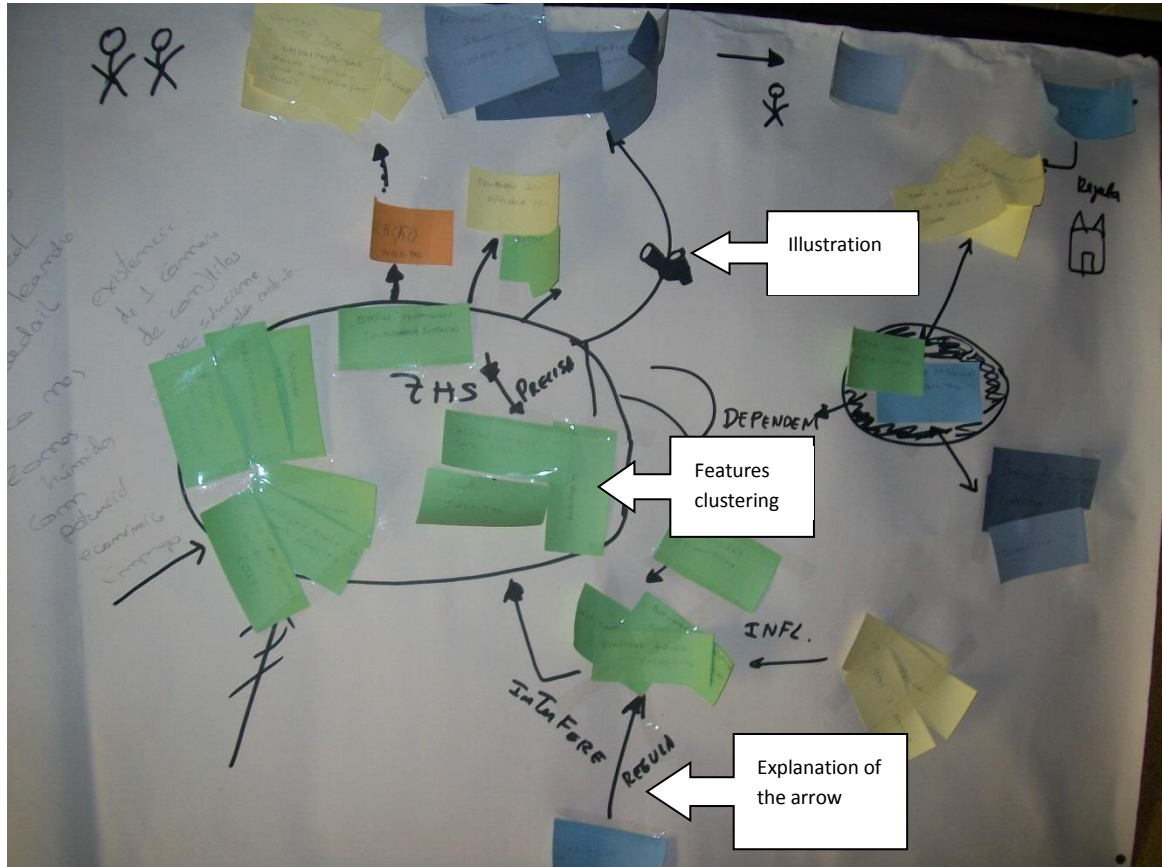


Figure 2– This image can be projected by the facilitator to provide an example of what could be the outcome of the exercise. There is no need to strictly follow this way of organization; however, this schematic type of format helps communication and, gives proper direction allowing an organized in-depth discussion among participants.

During the exercise the facilitator and redactor will follow each sub-group dynamics – each assigned to a different sub-group - without interfering in the dynamics. Keep as quiet as possible: confusion in the beginning of the exercise will happen, let the group establish their own rhythm. You may interact, for example, if you see one member is not participating and keeps writing issues he/she does not agree with on the paper; or if one participant is constantly cutting the words of the others. The main goal of the facilitator in each sub-group is to keep the group timing right and identify the appropriate moment for the participants to stop discussing among themselves and turn into the board were the narrative is summarized and made explicit for the remaining group².

² While testing this structure it was evident that when the groups start drawing, the vision becomes clearer and new discussions start. So it is important that they start drawing as soon as possible (taking into account the need to have a less structure at the beginning). In one hour of exercise you should start promoting the drawing after 30 minutes.

By the end of this exercise, 2 visions have been developed, one by each sub-group. These visions are presented to all participants of the focus group. In between the presentations allow the rest of the sub-group to add new information (not said by the spokesperson) – “Does the rest of the group want to add something to what was explained?” Don’t allow the other sub-group to interfere but tell participants to take notes of questions they have which will be promote the overall discussion at the end of the exercise.

After both presentations, time is planned to discuss the visions in the whole group. Here we will not be looking for consensus but rather to understand if some clarifications are needed, if all members of each group feel comfortable with the final visions, to have a better idea on the contrasting views within the group. After this discussion the team and participants go for lunch.

Register the meeting with photographic and audio records (after permission is given by the participants). It might be useful – for communication and analysis – to also register the meeting through filming, if this possibility exists AND you believe it won’t impact too much the dynamics of the group (which will vary in each situation).

Recommendations:

>> During the focus group choose the words right and continuously remind participants that the goal is about what they wish, what would give them more pleasure and not what could be possible.

>> Put the focal questions on the wall to help people focusing on what is at stake along the whole meeting.

>> Reduce as much as possible the discussion about the structure of the work or the way the base-line information has been organized in categories. If participants want to change a certain aspect from one category to the other there is no problem. The focus should always be on building a joint vision.

>> If the region is very diverse remind participants to specify if they are talking about the region as whole or not.

>> Say that they have 45 minutes to finish the exercise and then, almost at the end of the 45 min, give 15 minutes more. In reality they have 1 hour to the exercise, but adding some time pressure will promote a more focused and efficient discussion.

ANNEX 1 – Synthesizing tables with results per group type. During Phase 1 you have talked with participants that will integrate the four focus groups. This table should be different in each focus group and, should only include data from Phase 1 with respect to the participants of the focus group at stake.

| Land Cover | Elements in the landscape | Social/economic features of agricultural organization | Open issues |
|-----------------|---------------------------|---|------------------------|
| LC1 Montado | E1 Roads | SE1 Employment | I1 Sustainable use |
| LC2 Policulture | E2 Wind mills | SE2 Organization of farmers | I2 Multi-functionality |
| LC3 ... | E3 ... | SE3 ... | I3 ... |

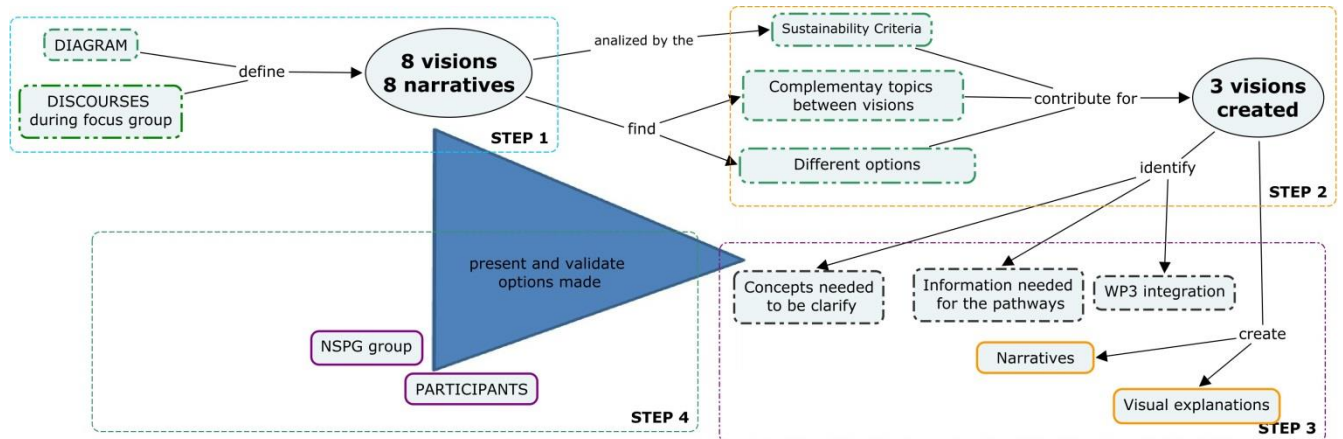
Refer to same colours as post-its/cards you will use.

8.3 PROTOCOL FOR VISIONS COMPILATION

Objectives:

- Merge visions from the previous step into three visions to be detailed in next step
- Validate the options made, with participants and NSPG group
- Start preparing the necessary tools to reach pathways.

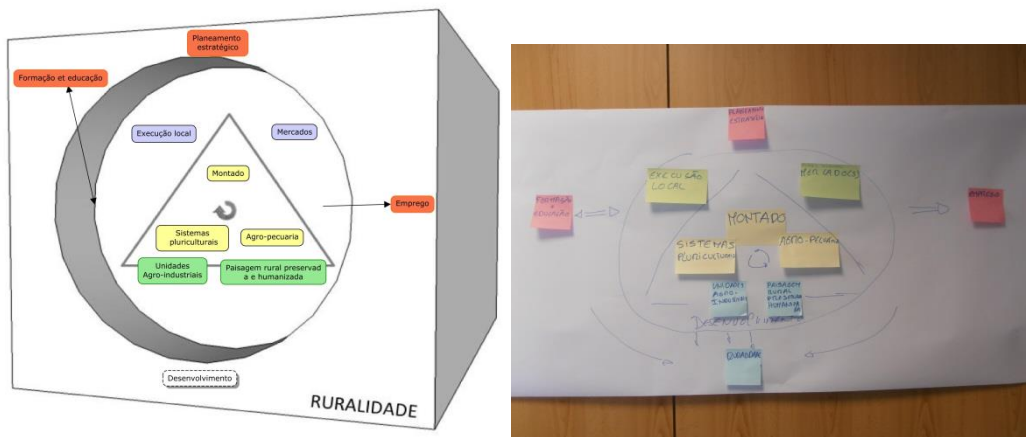
Scheme:



Step 1

Using the recordings of the Focus group meeting and the diagrams created produce a 300-400 words narrative for each vision created. The short narrative outlined in the reporting frame of phase 3 should be the starting point, but here you need to go in further specifications. If it helps you can use Cmap tools (free download: <http://cmap.ihmc.us/>) to have an electronic version of diagrams that can be useful to create the new visions.

Example:



Step 2

Taking into account the sustainability criteria defined by the NSPG, proceed with the assessment of the visions through these criteria, e.g., the same assessment exercise than the one done during the focus group, but this time compare all visions simultaneously.

Identify the common features and the different ones. These features can be complementary or opposing.

From all the above comparing efforts defined 3 visions an assure that:

- They are all different,
- They are opposing,
- They only include what was defined in the focus group,

- Do not change the meaning or add information that you consider relevant.

Probably you will have 3 visions that can represent two extremes and one middle point. Even if the extremes are much less sustainable (based on the criteria) than the middle one. This will help participants to see the differences between visions.

A possibility is that in one vision you include all common features between the devised visions, in another one you add the complementary features and in another you add the opposing features in relation the previous ones. Another possibility is that you look for what commonly is addressed as different scenarios for agriculture and the rural, as defined by Tim O’Riordan: one related with increased productivity and specialisation, and competitiveness; a second one focusing on the environmental and social concerns; and the third connected with localisms, local identity and cultural assets of the region. This could be guiding lines, if there were signs in this way in the visions outlined by the participants.

This seems not very concrete, but it is difficult to provide guidelines to something that will be very case specific; the best is to discuss this in the next meeting in Brussels and to keep contact so we can exchange experiences during this step.

Step 3

Having the 3 visions defined, try to identify concepts that need clarification, require information to define pathways, and consider how WP3 results can be helpful.

After this you need to create a narrative and maybe a visual exemplification for each vision in order to make it as easy as possible for participants to understand. This narrative should not be longer than the 300-400 words. It should clearly tell a story of the future of agriculture and land based activities in the region considered. The visual tools can serve as illustrations of the narrative or part of it.

Step 4

Present all this process to participants and the NSPG group. This step is a new chance for interaction that can be very beneficial to Phase 5, the overall project and participants.

The first option is to make this by face-to-face meetings with one or more participants, or by phone or by email. The first is quite time consuming while the later may not lead to engagement of the participants..

The second option, we strongly recommend, is to schedule a series of short presentations (1 to 1,5 hour) of these results and invite the participants and NSPG to be present, in small groups. You can use different places to do these presentations so it is easier for them to attend and they feel the team is close to them and is not asking too much of their time. This way you enlarge the chances of starting to have people from different groups present and interacting. Furthermore you will win time and diminish the difficulty of doing adaptations taking into account one or two individual opinions.

If in step 3, you have identified many questions in relation to the concepts and information need to promote a richer discussion of pathways you can use this opportunity to share the questions you have with participants that will certainly provide points of view that will help you prepare Phase 5.

Try to confirm if participants will attend these presentations and prepare well the moment of discussion so that all is recorded and that conclusions (in relation to validity of the visions created) are achieved. All participants that prefer on-to-one meeting, phone or email can still be consulted this way.

8.4 PROTOCOL FOR THE WORKSHOP - Pathways to reach the visions

Objectives:

- Identifying today's constraints and opportunities to reach the visions defined in the previous step
- Identifying pathways to reach the visions selected specifically:
 - Social and technological innovation³ needed,
 - Policies⁴ that need to be developed or changed,
 - Institutional arrangements⁵ that need to be developed or changed,
 - Governance⁶ mechanisms needed,
 - Necessary support measures
 - Networks amongst actors within the farming community, policy, technology and wider society that can lead to an increase of regional sustainability of agriculture
- Identify the contribution need at an individual, national, regional and European level
- Potentiate a higher level of awareness on possible transition pathways for participants region.
- Promote transdisciplinary^a work that hopefully will continue after FarmPath project

^a The concept is used by different schools of thought and today is not just a concept but a scientific field. Here we use the core idea of transdisciplinarity - different academic disciplines working jointly with practitioners to solve a real-world problem. The working together can be defined in many ways but within the concept it underlines active interaction between scientist and non-scientists.

Participants:

- Participants to the focus groups
- NSPG^b

^b NSPG interaction with participants was not contemplated in the previous methodological proposal; however, taking into account the interest of interaction between participants (in the Portuguese case, this was one of the main reasons of participants interest) and also in the NSPG members, we propose their inclusion in this final workshop.

- Research team^c

³ Following FarmPath glossary: while innovations are often understood as new technologies developed based on scientific research, this is only one type of innovation. Another type is social innovations, which often emerge bottom-up. Examples would be farmers seeking new forms of organisation (e.g. machinery rings rather than individual mechanisation) or new forms of connection to consumers. 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), and new forms of organisation might be enabled by new technology (e.g. internet sales as a form of direct marketing by farms).

⁴ Following FarmPath glossary a policy is a macro-level framework, based on a formal document (e.g. Common Agriculture Policy); conceptually hierarchically higher than strategy. Specifically for phase 5 protocol we consider that policies can be defined at the European and National level. There are some countries where at the Regional level there is enough autonomy to assume regional policies nevertheless this should be defined by each country.

⁵ Following FarmPath glossary, institutional arrangements are 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 and organizational structures both within agencies and between agencies. They include the way power related to decision-making is delegated, distributed or shared. These procedures and structures may emanate from the national or regional level.

⁶ Following FarmPath glossary, governance 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.

^c Transdisciplinarity implies stakeholders and researchers working together. For this to occur, researchers need to be considered participants in the process.

Researchers are seen differently among different cultures. In Portugal, for instance, we are highly respected and our findings are taken as true and seldom questions. In other countries, as in Denmark, people are educated to make questions and to question. So it is normal for scientist to be confronted. This difference has a great impact in a transdisciplinary setting. In the first case the remaining participants have a tendency to hear rather than to talk while in the second it's easier to create a co-constructive atmosphere. For those of you who are in the first case you need to use different strategy to make Phase 5 a co-constructive opportunity. We are not saying that you will all be successful but we mean it is worthwhile trying, while keeping in mind and acknowledging the limitation and processing with a strategy for minimizing its effects. Here stays some recommendation to tackle the issue:

- Ask the facilitator to clearly say that the goals of the meeting are: co-construction, informal discussions among participants, all contributions are valid; there is no right or wrong but rather different experiences, different types of knowledge.
- Within the research team discuss this topic and mentally train yourselves to be open to the experience, to be yourself, with your background and working experience: do not worry about the process and about facilitation. If the groups are no bigger than 6 participants they will find a way to organize the discussions and the tasks. The smaller the group the easier it gets.
- Because you have more information about the process than the remaining group, try to balance your own contribution to the discussion by not having a dominating or controlling attitude. Someone else will lead the group into the discussion.
- If participants start asking you questions about the structure of the exercise, behave as you know the same and direct the practical questions to the redactor of your group.
- For those of you who can have a facilitator in each group, that is great.

- Neutral experts^d that will clarify question raised by participants.

^d These people are not participants but are present to clarify certain concepts or specific questions. We have this in mind because in the Portuguese vision discussion there was some questions raised by participants that the team could not reply as they were too specific or outside our field of research. So we considered that the interest of the workshop could increase if we invited 2 or 3 specialists in certain topics (that raised some doubts in Phase 3). This is not obligatory and you should see if in our case is possible and needed.

Baseline structure of the workshop:

In terms of facilitation this is a very challenging work since we are considering around 50 participants, if all the involved participate. Taking into account that facilitation will be done by one person, the purposed structure includes plenary moments and working in groups (up to 6 persons/group) to reduce the facilitation effort and to make it as operational and simple as possible. If you have more than one facilitator that is great and you can reduce the number of groups. Taking into account 50 participants we have 8 groups of 6 persons each. This is the maximum number of people that a group can have without the need for external facilitation. If you can do smaller groups it is also good since the quality of the discussion increases. (i.e. easier for participants to organize the discussion and more time for each of them to talk. The ideal number is 4 persons; 3 persons per group usually imply that one talks, another one listens and another sleeps).

Each group should be accompanied by a redactor that can surgically interfere in the discussion of the group to be sure all the required outcomes are reached in the time available and, in case that one or more participants are constantly out of the discussion, to promote their participation. In case the project does not have the necessary number of redactors for all groups, place the existing one on the groups where more leaders of opinion are located. Do not allow the researchers that are participants to be the redactors since this will place them in a distinct position than all the other participants and will impact the desirable dynamic.

To secure a balanced discussion use your previous knowledge of the participants to group them: the leaders should stay with the leaders, if 2 people don't get along they should be in different groups, those that are more introverted should be together.

It's true that we might miss a leader of opinion since the behaviour might be different from the last interaction to the workshop; however, there is nothing we can do about it. The ideal situation is to have 1 main facilitator and 1 facilitator per working group. Since we cannot have this condition then the best we can do is to as well prepare as possible.

The idea is to make participants from different groups of interest to interact. Each group should have at least one participant of each focus group, one member of the NSPG and one researcher of the research team of FarmPath (6 in total). Probably you will not have one member of the research team in each group – in this case, try to place in the groups with no researchers, people from the “official Interest” group, who are more close to research and to a researcher attitude.

The most important thing is to assure that the groups are a mixture of different interest. If some group includes fewer participants try to place them in groups where you feel that discussion can be more equitable. The non-desirable option is to maintain the constitutions of the focus groups.

The place where the workshop will take place is of primordial importance and possibly not easy to find: a place with a large room (auditorium or conference room) for the plenary sessions, and 8 small rooms for each group to work, or as many as the foreseen number of groups. This way you assure that each group has enough tranquility to work in their groups. And you also create enough distinction between the moment of intense interaction, and plenary sessions were discussion between participants will require a high capacity of facilitation and organization. In case you don't have this ideal place try to find the most wide room as possible and if other nearby rooms are available, use them. You can place 2 to 4 groups together in the same place. If the plenary session can be in a different room it would be the best.

Material necessary to deliver to participants before and during the workshop:

We propose that the bellow information is delivered to participants approximately a week (not less) before the workshop, shortly presented in the plenary session and made available to all working groups. The written information to deliver should be synthetic and clearly written, so that it is easily understood by all participants, in the visioning and pathways process.

- *Visions narrative*

One narrative per final, build up, vision (300-400 words). You can also use visual tools to express the vision or the underlying principles in the vision

- *Description of the region framing in overall context*

Explicitly show the foreseen and most probable constrains and potentialities that will frame the region in 2030, so that participants can create credible and useful pathways. The information you can present depends on the information available for your region, but also on the issues that are more relevant particularly there.

| Topics to include | | | | |
|---|--------------------------|---|--|--------------------------|
| Characterization of the region: ecological and socio economic characteristics | Previsions on demography | climate change, if relevant and if reliable information available | Regulations: planning guidelines, specific classifications | planned infra-structures |

• *WP3 results and other niches information*

The capacity to define innovative pathways is related to the participants’ background, potential of the interaction promoted and available information. The idea of this section is to provide participants additional information related with niches that can be the drivers of changes. The document should highlight successful initiatives, those with less success and the reasons for it. In this section it is useful to provide a simple explanation of the theoretical background of FarmPath so that the WP3 information is better framed, and also the overall intention of what we are doing in WP5 is clearer.

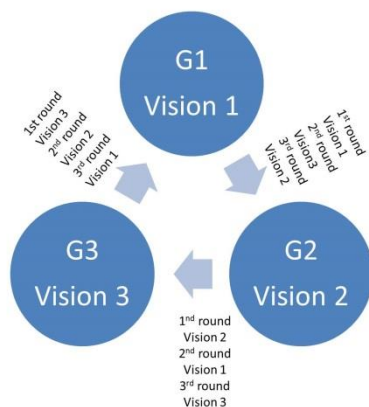
Research in each working group will have an important role in bring the transitional theory into the discussion since that is one of our main interests in the discussion. So don’t strain yourself and use this background to bring your arguments into the discussion. Just don’t give a class about it but keep in mind that it is your main interest in the exercise.

Worksheets and questions done during the workshop:

The workshop will be based on discussions that are always difficult to summarize and to fully follow; hence, we propose worksheets that participants need to fill at each step of the workshop and that will serve as a guideline for the spokesperson to explain the group conclusion during the plenary sessions.

Each group will work in a main vision but will also have the opportunity to comment on the remaining ones. This will be done by a circulation of each worksheet as explained in the following image:

Each group will work mainly on one vision but, after 50 min they will circulate their worksheet to the other group and receive a worksheet from the other. After 20 min they give the worksheet receive to the other group and receive another worksheet. After 20 min the last round of exchanges happens and this time each group will receive their main vision worksheet



WORKSHEET 1

The first question is **why the scenario has not happen yet**. Identify, for each vision, **today's and future constrains**. Constrains are features that can limit the achievement of the visions in discussion. Do the same exercise taking into account the opportunities identified today and that can exist in the future. Opportunities are features that allow the achievement of the vision in discussion. **The time line provided allows the group to perform this identification in a time specific manner.**

Why has the scenario not happened yet?



Constrains

Opportunities

Note: Provide this worksheet for each version and in double so that participants can do a draft and a final version.

WORKSHEET 2

For each vision define a pathway to reach it, taking into account the current conditions and the final goals. The general question is how can this vision be reached? In order to better guide this reflexion the general question is divided in the following topics

What is needed to achieve this vision?



| | Who will take each action? |
|---|----------------------------|
| Policies (EU and National Level) • Action 1: • Action 2: • Action 3: • ... | |
| Institutional arrangement (National and Regional Level) • Action 1: • Action 2: • Action 3: • ... | |
| Governance (Regional and local Level) • Action 1: • Action 2: • Action 3: • | |
| Other topics • Action 1: • Action 2: • Action 3: • | |

Despite the actors identify before is there any other actor that needs to be involved? Why?

Who is more likely to gain or lose with this vision?

| Winners | Losers |
|---------|--------|
| | |

Note: Governance in this worksheet only refers to the role of civil society and the private sector in 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. Institutional arrangements is the category where participants should include the needs in terms of governmental work while in this category it's about what non-governmental stakeholders can do.

During the groups discussions the material need are: Worksheets, white paper, pens, pencil, sharpens and erasers. The worksheets should be big – maybe A3 instead of A4 – and with lines to help participants write in a clear manner so everyone can read it after. If there is a redactor per group this task can be done by him so that we assure the readability of the outcomes.

This information is shared in the plenary session.

After, all participants are asked to reply to the following question:

How can you, personally, get involved and support the pathways identified? In which action are you prepared to get involved? How? And when? What would you need to start this involvement?

This is an individual exercise and should be done in the plenary session. Participants should take into account all visions and pathways. In one card they should identify the vision, the pathway and the action they are referring, as well as stating how they can be involved and when.

After this, each participant explains his/her contribution and the facilitator places each card close to the action the participant is referring. No discussion is allowed during this exercise since there is not enough time to engage in a prolong discussion during plenary sessions.