



Deliverable number 2.1

Guide to selection of practical cases

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Introduction

The aim of this deliverable is to provide a methodological framework for selecting and documenting best practice cases across Europe (in i2connect partner countries) showing how advisors effectively support individuals or groups involved in interactive innovation in priority areas. The selection framework explores the main characteristics of the cases in order to be able to select the ones that best fit the goals of i2connect; e.g. effect of the innovation case, relationships of actors, life cycle stage, attitudes of the actors and enabling factors. Best practices will be collected at local, regional or national levels by all partners and will be added to a web based catalogue for further use in the project.

The deliverable was developed as part of WP2, Task 2.1 (Develop practical case study selection methodology) under the responsibility of the expert team (experienced innovation support experts/ practitioners appointed by the partners) of i2connect lead by SZE. The basic principles of the guidelines were defined by SZE with the assistance of all partners and an expert team by two questionnaire surveys. The final process and criteria for selection of the practical cases were identified and agreed with the involvement of the expert team.

The activity was guided by the concurrent T1.1 (Provide conceptual ground, create mutual understanding) led by UHOH. Deliverable 1.1 - Conceptual grounds and common understandings- provides common frames, key concepts and technical terms from agricultural and forestry extension, innovation and knowledge systems research, human resource and organisational development, which were used at the development of the guidelines.

Interactive innovation, which is an important focus for i2connect, is a concept that helps to understand cooperation among various actors, the sharing of knowledge and effective intermediation between actors along the value chains and at different territorial levels. Key for interactive innovation is that existing, sometimes tacit, knowledge is included whereby end-users and practitioners are not only involved as study objects but their entrepreneurial skills and practical knowledge are used for developing the solution or opportunity, thereby creating co-ownership.

In D1.1 the UHOH team gathered several definition of the innovation process which was used at the development of the guidelines. Based on D1.1, the actors and the process of initialization and generation of an innovation is as follows: a farmer, a scientist, an advisor, or other actors in the AKIS can be the initiator and driving force to a new idea which could be a technical novelty, a policy initiative or a new social arrangement. However in order to become a real innovation, such a new idea needs to be translated into skills and technologies and subsequently innovation (Leeuwis and van den Ban, 2004 p.141). Likewise, Hruschka (1994), Rogers (2003) and Wielinga et al.(2017) highlight that innovation emerges from interaction between stakeholders involved in the process of addressing problems and challenges along value chains.

Documents developed for case selection

In order for each partner to select practical cases based on the same set of criteria and to document cases in the same way, and to be compatible with the web database, a unified documentation methodology is needed. To this end, the following documents have been drawn up by SZE team and reviewed by all project partners:

- Pro forma e-input sheet
- Multi-dimensional categorization scheme
- Matrix to catalogue proposed practical cases

Pro forma e-input sheet

The pro-forma e-input sheet has been designed with the purpose of collecting interactive innovation cases by i2connect partners all over Europe. Our goal is to efficiently collect data that is relevant to the aims of the project, give a good idea of the case for reviewers and that are also relevant to the creation of the searchable database.

The e-input sheet has been designed in a table form for easier transparency and uniform data entry and it is constructed of a header and a table part.

The header contains basic data of the innovation case: name or acronym of the practical case, country, location, innovation case level (local, regional, national, EU), and a narrative section (“Tell us your story...”) for a short story-format description of the case in 3-5 sentences (with typical pictures about the case), specifying the area and main features of the innovation.

The table consists of a *Category* column (Innovation scope and scale; Actors involved; Innovation process; Advisor client interaction), a *Characteristics* column with 16 specific questions grouped by the categories and a *Short description / categorization* column for descriptive answers to the questions of the Characteristics column or with selectable options (see Annex 1: Pro forma e-input sheet).

Multi-dimensional categorization scheme

The aim of the categorization scheme is to enable each partner to select the relevant practical cases, and to select cases in an unbiased and uniform way in all partner countries. The categorization scheme contains guides and rules for choosing the most relevant cases that meet the objectives of the project. In order to do this, the scheme was designed to comply with the guidelines set out in the application and to have a close link to the *Conceptual grounds and common understandings* (D1.1).

In addition, the results of the questionnaire surveys among project partners (Q1 and Q2) were strongly taken into account when formulating the guidelines. A separate Categorisation scheme / evaluation sheet must be completed for each case.

The categorization scheme consists of 5 columns:

- Category: same as in pro forma e-input sheet (Basic data, Innovation scope and scale, Actors involved, Innovation process, Advisor-client interaction).
- Link to questions of the pro-forma e-input sheet (there may be several criteria for the same question).
- Categorization criteria: criteria, guides and rules for selecting cases.
- Criterion weighting: the criteria are weighted according to their importance to the project (M= minor, P= primary).
- Evaluation: evaluators score the cases from 1 to 3 points according to how well they meet the criteria.

The cases categorized and selected according to the above scheme are included in the matrix.

After the first round of practical cases’ collection, evaluation results will be assessed and e-input sheet adjusted if needed.

Matrix to catalogue proposed practical cases

The cases selected in the multi-dimensional categorisation process cover a wide range of innovation challenges and topics and a large range of advisor/client interaction format. These selected cases flow into the matrix of proposed practical cases, which will be posted on the project's website to be reviewed by the interested public.

The structure of the matrix is based on the scheme, including case characteristics filtered and sorted by the selection guide.

The matrix table consists of two main columns/parts: one for the case characteristics (e.g. location, topic/issue, sector, advisor/farmer interaction, etc.) and one section for the proposed cases (case no. 1, 2, 3, in separate columns) describing in each row the main selection characteristics of the cases.

The matrix format allows users/reviewers to access the needed information easily, thus effectively find the most appropriate cases for field review in the database.

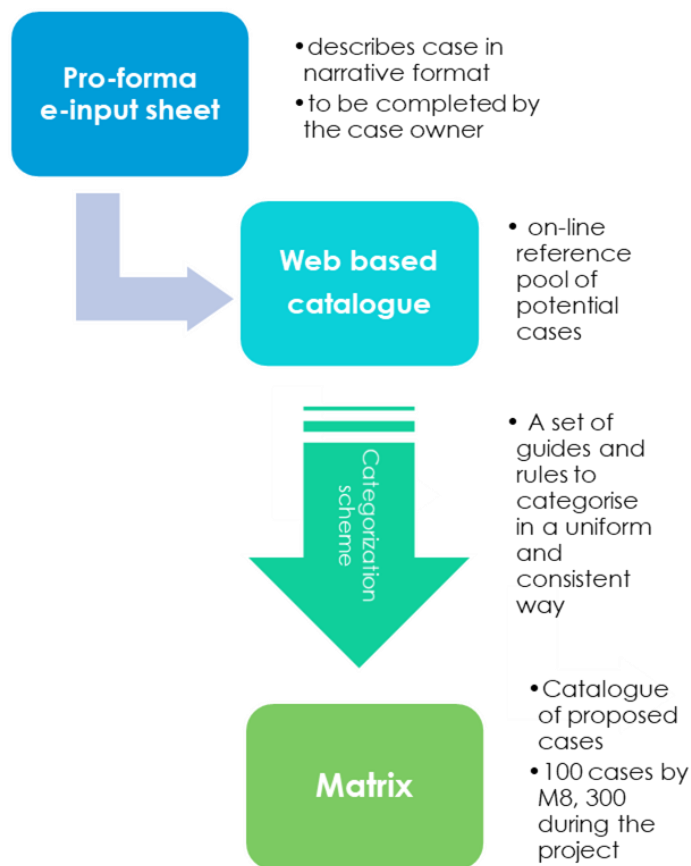


Figure 1. Process of case selection

Methodology

Within the framework of the i2connect project a web based catalogue of potential interactive innovation case studies will be developed. The catalogue will include 300 cases.

In order to co-design a process and agree on bias-free selection criteria for choosing the practical cases and draft a pro-forma e-input sheet, SZE designed a working process that involves all partners. The process consists of two questionnaire surveys and a common finalization of the case selection guide, resulting in the development of the following documents: pro forma e-input sheet, multi-dimensional categorization scheme, matrix to catalogue proposed practical cases.

Deliverable: Guide to the selection of practical case (D.2.1)

Participants: WP leader: SZE and Expert group

Questionnaire 1 (Q1)

- 3 open-ended basic questions about the process/criteria for selection of the practical case
- Aim: Provide suggestions for each one of the questions; experts express their views freely and in an informal way and describe their ideas on the subject.

- Responsible: SZE
- Participants: Expert group (TEAGASC, AUA, APCA, UHOH (T.1.1), WR, CREA, SZE)

As the first step of the process, SZE has created a questionnaire to lay the foundations for developing the guidelines and to gather the opinions and viewpoints of the members of expert group on how to approach the topic in a broader sense and in order to determine which aspects should be emphasized when developing the selection criteria. The questionnaire was sent to the expert group.

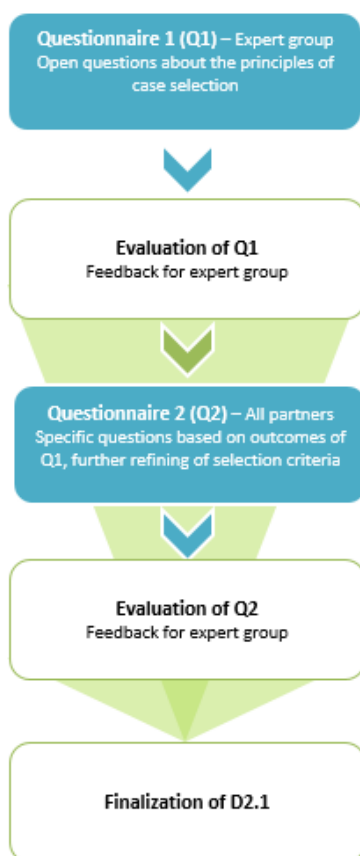


Figure 2. Process of development of the Guide to selection of practical case D2.1

The questions of Q1 were the following:

1. *What do you think are the hot topics/challenges in advisory where interactive innovation plays a role? (local, regional, national, European levels) How can interactive innovation help address these challenges effectively? (Climate-smart farming/forestry, productivity and sustainability, changing societal policies, artificial intelligence, sector-specific issues...)*
2. *What is the role of AKIS members (farmers/foresters, advisors, scientists, policy makers, other actors) in interactive innovation? What other factors influence the effectiveness of interactive innovation and how?*
3. *If you could name only three main criteria for selecting practical cases / best practices, what would these be? Please explain why.*

Evaluation of Q1

Responsible: SZE

Participants: Expert group (TEAGASC, AUA, APCA, UHOH (T.1.1), WR, CREA, SZE)

The open-ended questions were analysed qualitatively by SZE by sorting, categorising and searching for common themes and general findings which can be used in the development of the guideline. The responses were edited and used to construct the second questionnaire. The evaluation summary was sent to experts for further reflection.

Questionnaire 2 (Q2)

- 17 specific questions (alternative, selective, scale, no open questions) based on Q1
- Aim: Choose main characteristics of case selection methodology (categorization scheme, matrix, pro-forma e-input sheet); region specific approach
- Responsible: SZE
- Participants: all partners

Based on the outcomes of the evaluation of Q1 and the feedbacks from experts, SZE elaborated a second questionnaire with more specific questions, to gather ideas and opinions from all project partners to further define the case selection guidelines.

With the questionnaire SZE mapped the partners' attitude towards the challenges facing the advisors and assessed their thematic preferences, in order to use the results in shaping the case selection guidelines, and to determine the main areas that need to be addressed at developing the categorization scheme and the matrix.

The questionnaire was filled in by all partners, thus, the responses received provided a broad basis for developing the guidelines for selection of the practical cases.

Evaluation of Q2

Responsible: SZE

Participants: Expert team (TEAGASC, AUA, APCA, UHOH (T.1.1), WR, CREA, SZE)

The answers to the specific questions were analysed by SZE by sorting, categorising and searching for common understanding. The outcomes were used for shaping the case selection guidelines, and to determine the main areas that need to be addressed at developing the categorization scheme and the matrix.

The evaluation was sent to the experts for further reflection and was also used as a basic starting point for developing the selection guidelines.

Finalization of practical case selection guide (D.2.1)

Responsible: SZE

Participants: expert team (Experienced innovation support experts/ practitioners appointed by the partners)

Aim: Finalization of the practical case selection methodology for preparing D.2.1. Finalizing the process and agree on criteria for selection of the practical case and the pro-forma e-input sheet (in cooperation with T.1.1). Agree on the final content and methodology of the multi-dimensional categorization scheme and matrix.

SZE sent the draft Guide to Selection of practical cases, scheme and matrix for the expert team for discussion and feedback. Partners presented their views and suggestions for amendment on the developed materials. Improved versions of the documents were prepared by SZE and circulated to the participants for final review and feedback.

The guidelines have been completed based on the partners' last comments and recommendations.

Outcomes of the second questionnaire survey

When developing the case selection framework, we relied heavily on the results of the second questionnaire survey (Questionnaire 2). The main outcomes of the survey are the following:

Innovation challenges, topic, content

The results of Q2 show that one of the biggest challenges advisors are facing today is the transformation of the role of advisors/advisory services, to be able to adapt changing circumstances, and to develop new skills, competences and methods. The future role of farm advisory services should include facilitating innovation projects on digital technologies as well as supporting farmers to orient themselves in the digital landscape. AKIS itself will become more and more “digitalised”. New decision support tools become available every day and open knowledge reservoirs will be built¹.

In the light of the questionnaire results, innovation cases with a strong new technology/digitalisation factor should be given high priority. At questions regarding the type and scope of innovation, it came out clear that the vast majority of partners considered important to take into account the innovation type/characteristics (77% of all respondents), e.g. social innovations, market innovations at the selection of practical cases. The majority of partners found essential to distinguish cases on the basis of agro-climatic, geographical or socio-economic characteristics, but they did not find the time horizon of the innovation an essential factor.

Concerning thematic characteristics, a high percentage of respondents gave great importance to environmental questions (sustainability, climate change, biodiversity, pesticide use reduction) and social and organizational issues. The high rate of “yes” answers (76,9%) to the question “How important do you think the selected case is to address and have impact on key social/environmental issues?” also confirms the importance of placing particular emphasis on these topics at selecting the cases.

Innovation process, methodological format

The questionnaire also contains questions/answer options regarding the changing role of advisors/advisory services, the challenges advisors face in the different partner countries across Europe and about their attitude towards networking culture.

As mentioned in the draft of the Conceptual grounds and common understandings (D1.1), the network approach to innovation, resulted from the increasing recognition that complex problems in the agricultural sector cannot be dealt by one actor alone. Instead, diverse societal actors with diverging interests and value need to come together to co-create new innovations (Hermans et al. 2015).

It is interesting to observe the attitude of partners from different parts of Europe (CEE countries, Western European countries, etc.) towards the importance of networking in interactive innovation. At the question “What are the most important characteristics of the practical cases to be selected?” 57, 6% of all respondents marked the option “Networking” as important, of which 33, 3% were participants from CEE countries. This corresponds approximately to the proportion of CEE countries within all respondents, so there is no significant difference in the attitude towards networking between participants from CEE and other countries.

Concerning innovation process, answers with multi-actor, participatory and co-creation approaches were the most preferred, while “classical” top down model was not selected at all.

As UHOH team mentioned in the Conceptual paper draft, “Multi-actor approaches are not new and have over thirty years, been a key principle in EU policy making, a more recent example being initiatives such as EIP-Agri and Horizon 2020.”

Although this approach has long existed as a theory in academic circles or at companies with a more advanced corporate culture, it has not yet become really widespread in advisory work.

¹ Preparing for Future AKIS, SWG SCAR AKIS Report 4: https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/key_policies/documents/report-preparing-for-future-akis-in-europe_en.pdf

Actors

Partners were asked about their preferences concerning the actors involved in the selected innovation cases. About two thirds of the respondents recommend that we should predefine the minimum number of multiple actors involved in the selected cases, which should involve cases with a certain number (at least one actor per case) of the following types of actors: farmers/foresters, advisors and researchers. Respondents were equally divided on whether the type of advisory organisation was an important criterion at the selection of the cases.

Annex 1 Pro-forma e-input sheet



Name and email address of the person filling in:

Name:

E-mail:

Please mark the appropriate statement or attribute with x and complete the text sections.

PRO-FORMA E-INPUT SHEET FOR INTERACTIVE INNOVATION PRACTICAL CASES					
Name or acronym of the practical case:					
Country, location (municipality, district or region):					
Contact person name and email:					
<p><i>Tell us your story...</i></p> <p>Please give a short description of the case in 3-5 sentences - specify the area and the main steps of the innovation. Please attach at least one picture to illustrate this practical case.</p>					
Innovation case level (you can select more options)		Local	Regional	National	EU
Category	Characteristics	Short description / categorization			
Innovation scope and scale	1. Topic - What is the case about?	<input type="checkbox"/> Arable crops <input type="checkbox"/> Annual and permanent crops <input type="checkbox"/> Permanent grassland <input type="checkbox"/> Horticulture <input type="checkbox"/> Vineyard <input type="checkbox"/> Forestry <input type="checkbox"/> Agroforestry <input type="checkbox"/> Livestock Other:			
		Farming systems: <input type="checkbox"/> Conventional <input type="checkbox"/> Transitional and organic farming <input type="checkbox"/> Precision farming <input type="checkbox"/> Mixed farming			

	<p>2. Highlight 3 key characteristics of the innovation. Please give 3 keywords that you think best describe your innovation (e.g. networking, sustainability, climate smart, economic efficiency, etc.).</p>	<p>Keywords:</p> <p>1.</p> <p>2.</p> <p>3.</p>
	<p>3. Under what agro-climatic conditions does innovation take place?</p>	<p><input type="checkbox"/> Alpine north</p> <p><input type="checkbox"/> Alpine south</p> <p><input type="checkbox"/> Atlantic central</p> <p><input type="checkbox"/> Atlantic north</p> <p><input type="checkbox"/> Boreal</p> <p><input type="checkbox"/> Continental</p> <p><input type="checkbox"/> Lusitanian</p> <p><input type="checkbox"/> Mediterranean Mountains</p> <p><input type="checkbox"/> Mediterranean North</p> <p><input type="checkbox"/> Mediterranean South</p> <p><input type="checkbox"/> Nemoral</p> <p><input type="checkbox"/> Pannonian</p>
	<p>4. Does the case address and have impact on key social issues?</p>	<p><input type="checkbox"/> yes</p> <p><input type="checkbox"/> no</p> <p>If yes, please describe how:</p>
	<p>5. Does the case address and have impact on key environmental issues?</p>	<p><input type="checkbox"/> yes</p> <p><input type="checkbox"/> no</p> <p>If yes, please describe how:</p>
	<p>6. Which type of innovation does the case belong to?</p>	<p><input type="checkbox"/> Technological</p> <p><input type="checkbox"/> Process</p> <p><input type="checkbox"/> Market innovations, new markets, value chains</p> <p><input type="checkbox"/> Financing</p> <p><input type="checkbox"/> New products, services</p> <p><input type="checkbox"/> Social / organisational</p> <p>Other:</p>
<p>Actors involved</p>	<p>7. Main initiator / owner of the innovation</p>	<p><input type="checkbox"/> farmer</p> <p><input type="checkbox"/> forester</p> <p><input type="checkbox"/> advisor / advisory service</p> <p><input type="checkbox"/> farmers' organization</p> <p><input type="checkbox"/> research institute/university</p> <p><input type="checkbox"/> SME</p> <p>Other:</p>

	8. Education level of case owner	<input type="checkbox"/> Primary education <input type="checkbox"/> Secondary general education <input type="checkbox"/> Secondary vocational (agriculture) education <input type="checkbox"/> University level (BSc, MSc)
	9. How many people are involved in the innovation process? Please enter the estimated number of participants.	
	10. Is the case involved in an EIP-Operational group?	<input type="checkbox"/> yes <input type="checkbox"/> no
Innovation process	11. What model(s) of funding apply for the innovation	<input type="checkbox"/> Free public service <input type="checkbox"/> Subsidies to private services, service contracts, voucher schemes <input type="checkbox"/> Cost recovery by government <input type="checkbox"/> Private enterprises
	12. Was the innovation case supported through a policy instrument?	<input type="checkbox"/> yes <input type="checkbox"/> no If yes, please describe how:
	13. At what phase is the innovation case currently?	<input type="checkbox"/> Concept: Extensive analysis and derivation of concepts for the solution, implementation and marketing. <input type="checkbox"/> Solution: Development and testing of the solutions to the finished product. <input type="checkbox"/> Market: Arouse and fulfil a customer's needs by implementing in production and logistics, marketing and sales.
	14. How widespread is the innovation applied? - Estimated number of adopters: - Frequency of application (e.g. number of users, downloads)	
Advisor client interaction	15. Which advisor/advisory service is involved in the innovation case? (can be multiple answer)	<input type="checkbox"/> Public organization <input type="checkbox"/> Private organization <input type="checkbox"/> Farmer-based organization <input type="checkbox"/> Non-governmental & non-profit organization Other:
	16. What form of advisory methods were used to facilitate the interaction with actors? (can be multiple answer)	<input type="checkbox"/> Office consultation <input type="checkbox"/> On farm visit <input type="checkbox"/> Phone call / On-line consultation <input type="checkbox"/> Presentations <input type="checkbox"/> Demonstration <input type="checkbox"/> Teamwork <input type="checkbox"/> Creative workshops <input type="checkbox"/> On-line knowledge platforms Other:

Annex 2 Categorisation scheme

CATEGORY	LINK TO PRO-FORMA E-INPUT SHEET QUESTIONS	CATEGORISATION CRITERIA	CRITERION WEIGHTING	EVALUATION
Basic data	Country, location	<p>This is not a decisive factor in choosing a case.</p> <p>Cases should be distributed approximately equally among partner countries</p>	-	-
	Country, location	<p>Is it a CEE country?</p> <p>Cases from CEE countries should have a strong representation in the project.</p> <p><i>“Special attention should be given to the CEE countries where knowledge sharing attitudes and interconnectivity within the AKISs are still limited.</i></p> <p><i>The online catalogue will include a strong representation of ... cases from CEE countries.”</i></p> <p>CEE countries in i2connect: Bulgaria, Croatia, Hungary, Latvia, Lithuania, Poland, Slovenia</p> <p>+ further SEASN countries: Kosovo, Macedonia, Montenegro, Romania, Serbia</p>	P	
	Short story	<p>This is not a decisive factor in choosing a case.</p> <p>Cases should be distributed approximately equally among different types.</p> <p>Cases that help the improvement of knowledge sharing attitudes and interconnectivity within the AKIS in CEE countries should be prioritised.</p>	-	-
	Innovation case level	<p>This is not a decisive factor in choosing a case.</p> <p>Cases should be distributed approximately equally among all levels.</p>	-	
ation scope and	Q1 Topic	<p>Generally this is not a decisive factor when choosing a case, but rather focusing on the "quality" of the case. However, it can be a relevant data</p>	-	

		when searching in the database.		
	Q2 3 key characteristics of the innovation	Based on the results of Questionnaire 2, cases containing the following characteristics should be given greater weight: networking, co-operation, participatory process, co-creation, complementary types of knowledge, sustainability, climate smart, user friendly, social, farm succession	M	
	Q3 Agro-climatic conditions	Cases should be distributed approximately equally among the agro-climatic regions. However, it can be a relevant factor when searching in the database.	-	
	Q4 Social issues	Cases including these factors should be given greater weight in the catalogue.	P	
	Q5 Environmental issues	Cases including these factors should be given greater weight in the catalogue.	P	
	Q6 Type of innovation	Outcomes of Questionnaire 2 show that Social and organisational innovations; Market innovations, new markets, value chains and Technological innovations are considered the most important and have to be included to the catalogue of practical cases.	M	
Actors involved	Q7 Initiator/owner of case	Not relevant	-	
	Q8 Education level	Generally this is not a decisive factor when choosing a case. However, it can be an interesting factor when searching in the database.	-	
	Q9 No. of participants	Not relevant	M	
	Q10 EIP-Operational group	Is the case involved in an EIP-Operational group? Connection with the conceptual background of the project - the online catalogue should include a	P	

		strong representation of EIP-Operational Groups and cases from CEE countries.		
Innovation process	Q11 Funding models	Not a decisive factor in choosing a case.	-	
	Q12 Policy instruments	Not a decisive factor in choosing a case.	-	
	Q13 Phase	Cases where innovation has already reached the market stage should be given more weight in the catalogue.	M	
	Q14 Application range	Not a decisive factor in choosing a case. Cases should be distributed approximately equally among all levels. We should focus on the more widespread innovations when choosing a case.	M	
Advisor client interaction	Q15 Advisor/advisory service	Not a decisive factor in choosing a case.	-	
	Q16 Advisory method	Not a decisive factor in choosing a case. Based on the results of Questionnaire 2 the following advisory methods should be prioritized to present best practices: teamwork, on farm visit, demonstration, creative workshops	P	
Sum of points				
<ul style="list-style-type: none"> • A separate Categorisation scheme / evaluation sheet must be completed for each case. • Score the cases according to how well they meet the criteria (3 points: the case meets the criterion very well, 2 points: the case not fully meets the criterion, 1 point: the case does not meet the criterion). • At primary factor (P), give double points. • Add up the points you gave for the case. • 100 cases with the highest score should be selected first, growing to a catalogue of up to 300 cases in the course of the project. 				

Annex 3 Matrix

CASE CHARACTERISTICS	INNOVATION CASE NO.				
	1	2	3	4	...
Name of the practical case					
Country, location					
- CEE country (Y/N)					
- EIP-Operational group member (Y/N)					
Case level (local, regional, national, EU)					
Topic/issue/sector					
Agro-climatic conditions					
Social issues (Y/N)					
Environmental issues (Y/N)					
Innovation type					
Initiator/owner					
Educational level of case owner					
No. of participants of the innovation process					
Funding models					
Policy instruments					
Phase					
Application range					
Advisor/advisory service					
Advisory method					

Publication bibliography

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