

Engineer project report

Study and comparison of multi-criteria evaluation methods for agricultural operations for the EUfarms network of organic agroecological farms

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Abstract

This project is proposed by EUfarms, a network of organic agro-ecological farms. The aim of EUfarms is to report on the capacity of the network's farms to be economically viable and pioneers in environmental issues, while at the same time being part of social and territorial dynamics. To achieve this, network farms need to be assessed using multi-criteria evaluation methods. Given the multitude and diversity of these methods, it is necessary to compare them and select the one best suited to the needs and characteristics of the network's farms. To this end, a series of method selections was made from a large initial pool, in preparation for applying the methods on a test farm in the network. Five methods (IDEA 4, OASIS, TAPE, Diagnostic durabilité, Open Compass) emerged from the selection, and four of them were applied in the field. After analyzing the results and comparing the methods against criteria of importance to EUfarms, recommendations were made as to which methods should be preferred. The OASIS and IDEA 4 methods offer many advantages for the association's work. However, there are two opposing visions. OASIS is more focused on the farmer's progress in the agroecological transition of his practices, while IDEA takes a highly technical approach to sustainability, using quantitative indicators and focusing on impacts rather than practices.

1 Introduction

1.1. Structure presentation

EUfarms is a European network of certified organic agroecological farms, created in 2023. This association combines the creation of an international network of farms, an action research program, and the provision of a space for peer-to-peer sharing.

The network has three main objectives:

- To raise the profile of pioneering organic agroecology farms;
- To provide support through a network of peer-learning farms;
- Transmit and support the agroecological transition.

The network now consists of more than 320 farms and spans five countries in the European Union. Ultimately, the association's goal is to establish a network of organic agroecological farms across the European Union to demonstrate that there is an ecological and social alternative to the dominant production model in Europe. EUfarms defines agroecology as follows: "Agroecology is based on organic farming and aims to enrich it in a spirit of regenerating agroecosystems by drawing inspiration from nature. Agroecology also means including our farms in local economies, promoting social equity." Thus, there are a number of criteria, corresponding to this conception of agroecology, for joining the network:

- The farm must be certified organic or hold another even more demanding label (Demeter, Nature et Progrès, BioCohérence, ROC, etc.);
- Its surface area must be greater than 30 hectares (although smaller farms that are part of a regional cooperation initiative may be included);
- The farm must have at least two production workshops and one processing unit.

1.2. Presentation of the engineering project

The project between EUfarms and AgroParisTech is part of the aforementioned objective of "raising awareness." EUfarms' goal is to demonstrate the network's farms' ability to be economically viable and pioneers in environmental issues while integrating into social and territorial dynamics. To achieve this, the association plans to carry out a multi-criteria sustainability assessment of 20 test farms in the network, before eventually extending this assessment to all farms. The results of these assessments will then be formalized in communication materials using the FarmID format or farm identity card.

However, given the multitude of existing multi-criteria assessment methods for farms, it is necessary to compare them, test their use, and understand the extent to which they meet the needs and characteristics of farms in the EUfarms network.

The objective of the engineering project is therefore to compare existing evaluation methods in order to test them on test farms and make recommendations on the methods best suited to the defined context.

2 State of the art bibliography

2.1 Definition and construction of multi-criteria evaluation methods

"An evaluation method is defined as an analytical framework based on a set of predefined rules. An evaluation is described as multi-criteria when it involves more than a simple description using several criteria and therefore proposes an analysis and interpretation of all of these criteria, which may involve phases of weighting, compensation, and aggregation of the different criteria." (Lairez, Feschet, and Aubin 2016)

Generally, multi-criteria assessment methods for agricultural systems are constructed as a set of criteria. "Criteria are variables that break down sustainable development and serve as a basis for judgment. These may include, for example, the profitability of a farm. Indicators are used to measure or estimate the criteria. In the example of the profitability criterion, possible indicators include gross margin, net margin, and gross operating surplus." (Lairez, Feschet, and Aubin 2016). The criteria can therefore be based on one or more indicators, which may be of different types. First, these indicators may relate to practices (e.g., tillage intensity, IFT, amount of organic matter added) or effects (e.g., frequency of occurrence of soil macrofauna, abundance of insects, organic matter content, etc.). Secondly, these indicators can be quantitative (calculation or measurement) or qualitative (yes/no, perception, semi-quantitative scale).

In addition, each method has its own hierarchical framework, i.e., it consists of categories that allow criteria to be organized. For example, a multi-criteria assessment method can be divided into three main dimensions: "Economic," "Social," and "Environmental," which correspond to the pillars of sustainable development. This internal organization of methods is specific to each one, and the vocabulary used to describe the different categories can vary significantly (dimensions, values, objectives, etc.). This hierarchy of method components was presented by Mr. Guilpart during his course "Evaluating Agricultural Practices" delivered at AgroParisTech in the PISTv specialization program in October 2024, where the diversity of nomenclatures between methods was highlighted. However, it is important to understand it well in order to best characterize the method.

Finally, Mr. Guilpart emphasizes the importance of prioritizing the points that matter to the client when approaching their system using the method. It is this prioritization that makes it possible to better distinguish the methods that could be suitable for their system.

2.2 Overview of existing methods and their diversity

The most recent research conducting a survey of multi-criteria assessment methods reports more than 4,523 sustainability studies concerning agriculture and 262 methods aimed at taking environmental considerations into account in the analysis (Soulé, et al. 2021). This demonstrates that there are already a significant number of multi-criteria assessment methods in existence. However, these methods are characterized by a great deal of diversity in their construction and in the content they evaluate. They are all dependent on the definition of sustainability and agroecological transition used by the creators of the method and on the context and objectives specific to their design (Darmaun 2023). There is therefore a real need to identify the prerequisites and find the method best suited to the identified needs before using a multi-criteria assessment method (Lairez, Feschet, and Aubin 2016). In addition, there is the question of the transferability of methods to

contexts other than those for which they were designed. A method may be very faithful to the values and objectives of a stakeholder wishing to use it, but may not be applicable in their context (defined climatic or geographical area, specific reference data, specific production sector, guide not translated into the user's language, etc.).

The work (Soulé, et al. 2021) is very interesting in the context of the project because it provides a comprehensive and concrete example of a comparison of multi-criteria assessment methods with the aim of covering the agroecological transition. In this work, the methods were compared using various main categories: type of literature, purpose of the method (propose, select, raise awareness), production sector (varied, cereals, livestock), aggregation method (sum of scores, no aggregation, etc.), type of assessment (ex ante or ex post).

3 Questions

The state of the art in the literature shows a wide variety of multi-criteria evaluation methods for farms. This diversity is characterized by a multiplicity of ways of characterizing farms and, therefore, of criteria taken into account in the evaluation. In addition, the methods respond to specific objectives defined by those who develop them and are therefore adapted to very specific evaluation contexts.

On the other hand, EUfarms has its own criteria and specific objectives to take into account when evaluating farms in its network. The evaluation must cover farms located across the European continent, with a minimum area of 30 hectares containing several production units (both crop and livestock) and a processing unit. Furthermore, given that EUfarms aims to report on the ability of its farms to produce healthy, ecosystem-friendly, and socially just food, while also being economically profitable, it is essential that the method reflects the complexity of these issues.

There is therefore a real tension between the large number and diversity of multi-criteria assessment methods and EUfarms' need to find a method that best meets its expectations and objectives. It is therefore essential to identify the criteria that are important to EUfarms, take stock of existing methods, and then compare and select methods before applying them. This work is all the more necessary given that the farms in the EUfarms network have specific characteristics that differ from most of the farms on which assessment methods are often based, particularly with regard to the diversification of activities and the presence of on-farm processing.

It is therefore legitimate to ask:

How can we compare the many existing multi-criteria assessment methods? How can we select one that is suited to EUfarms' needs and objectives so that it can be applied to the farms in the network?

4 General approach and initial selection results

This section discusses not only the approach that guided the project, but also the *preliminary* selection results. That is, the selection results obtained from filters or selection grids prior to field application. In addition to their intrinsic value, these results provide insight into the approach outlined and the choices made throughout the project.

4.1 Getting to grips with the subject: pools of methods and development of the approach

First, the focus was on understanding the subject of multi-criteria assessment of farms.

EUfarms pool

To this end, a bibliographic corpus was provided by EUfarms at the start of the project. This corpus included theses and study reports, as well as technical and methodological documents relating to different multi-criteria assessment methods. In Figure 1, the methods corresponding to this corpus are represented by "Pool EUfarms."

Pool Soulé et al.

Research additional were carried out. (Soulé, et al. 2021) provides a pool of 262 methods in its Appendix D (see Figure 1, "Pool Soulé et al."). Beyond the keys to analyzing methods, familiarizing oneself with the content of methods (by looking in detail at the proposed indicators, the implementation of the method, and also the results) makes it possible to better design the future strategy for selecting methods.

Additional sources

In light of Nicolas Guilpart's course (see 2.1), we also understand that it is important to fully understand the needs of the client who wants to

an assessment of its system. This involves back-and-forth discussions to prioritize the points that are important to the sponsor in terms of its approach to its system, thereby making it easier to identify the methods that could be suitable for its system. Through discussions with EUfarms, we have prioritized the points that will be essential for us in selecting one or more methods of interest:

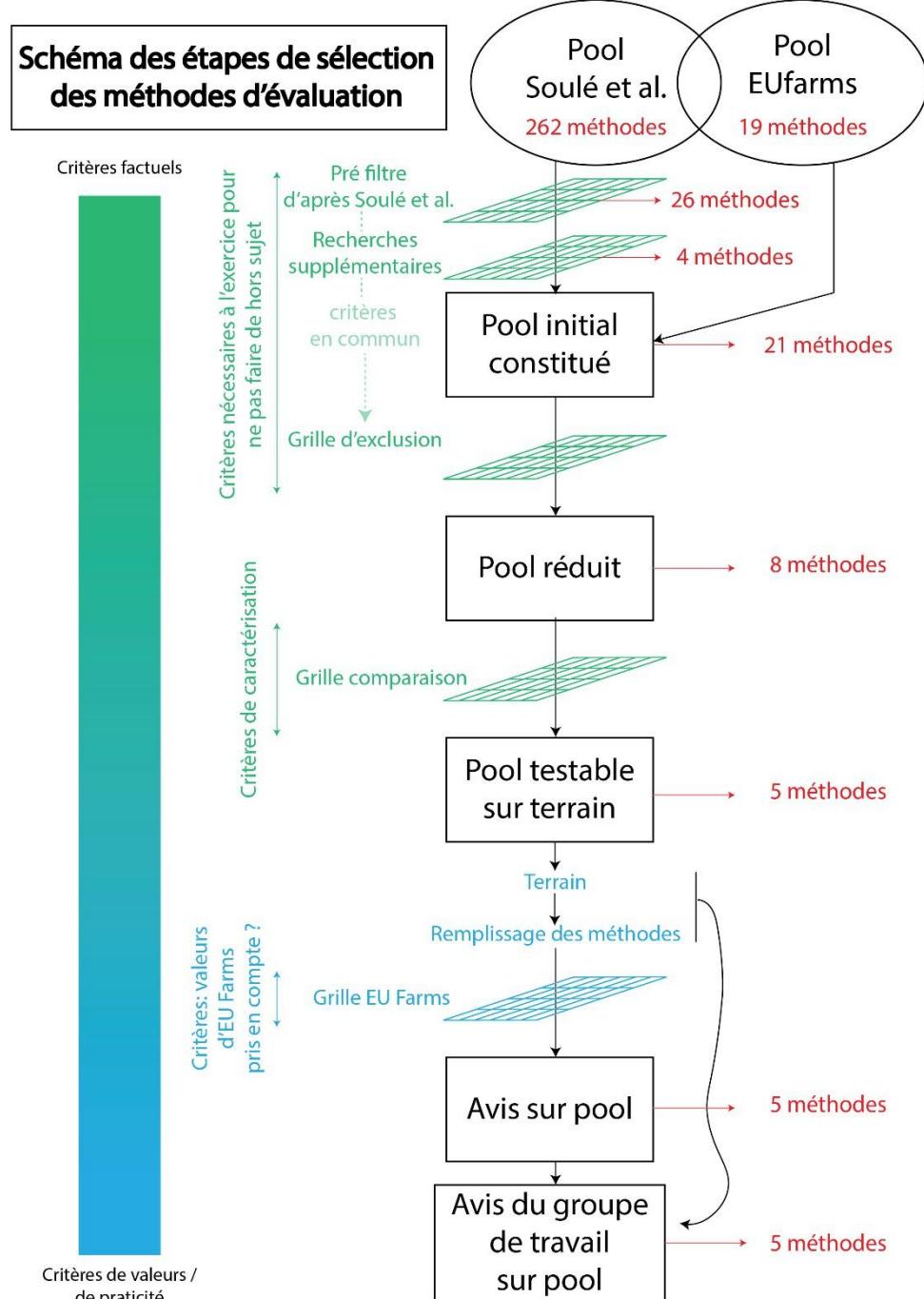


Figure 1 - Diagram of the steps involved in selecting evaluation methods

- The essential criteria for EUfarms' objectives. If the method does not take these criteria into account, the final assessment will be irrelevant. This is the case, for example, with a multi-criteria assessment method that is only suitable for tropical climates.
- The content of the criteria and indicators taken into account in the assessment and the way in which they reflect EUfarms' definition of agroecology.
- The practicality of applying the method in the field (real-time questioning, understanding of its elements, obtaining results and understanding them).

With this external assistance, the selection process can be refined:

- Filter the pool of 262 methods (Soulé, et al. 2021) to obtain a few methods to add to the initial pool sent by EUfarms (see Figure 1, "Pre-filter");
- Apply the criteria essential for considering the method according to EUfarms to this pool: creation of an exclusion grid (see Figure 1, "Exclusion grid");
- Using the methods validated by the exclusion grid, characterize the methods and then compare them in order to select a limited number to test in the field: creation of a comparison grid (see Figure 1, "Comparison grid");
- After field testing, the criteria expected by EUfarms will be studied for each of the methods, making it possible to see which one or ones are most suitable (see Figure 1, "EUfarms grid").

4.2 Method sorting phase

Now that the phase of gathering all the methods has been completed, it is time to move on to the actual sorting of methods with the aim of testing the selected methods in the field during the evaluation of a farm (Sorans-lès-Breuray, Franche-Comté).

4.2.1 Pre-filtering of the pool of methods from the study by Soulé et al.

The work of Soulé et al. presents a pool of 262 methods (Soulé, et al. 2021). In the appendices to their work, it is possible to find the table characterizing the methods (Table D).

The aim is to build on the work of (Soulé, et al. 2021), which provided a state-of-the-art review of most existing assessment methods, and to select those that meet certain essential criteria for the methods sought by EUfarms. This selection will be added to the pool of methods provided by EUfarms, accompanied by documents on each of them (see Figure 1: "Pool according to Soulé et al." to "Initial pool").

In the table by (Soulé, et al. 2021), methods are characterized according to various criteria such as: climate zone, production system, sustainability dimensions, etc. A filter is applied to the criteria of interest. Thus, based on the expectations expressed by EUfarms, the following criteria can be used to filter the methods in the pool:

- Degree_genericity: some methods are only applicable in a single zone, which is not relevant for EUfarms, given its international nature and the search for a method that can be adapted to the associated countries.
- Climate_zone: some methods only apply to tropical climates. EUfarms focuses on European countries, which have a temperate climate.

- Production_sector: in the criteria for inclusion of farms in the EUfarms association, diversification of production workshops is mandatory and must therefore be taken into account in the methods chosen
- Sustainability_dimensions: EUfarms defines sustainability as comprising three dimensions: economic, environmental, and social. The method must therefore address these three dimensions
- Spatial_resolution: EUfarms wishes to focus its assessment at the farm level.

The filters applied to the criteria presented above are as follows:

Degree_genericity	Climate_zone	Production_sector	Sustainability_dimensions	Spatial_resolution
<input checked="" type="checkbox"/> Dedicated method <input checked="" type="checkbox"/> Methodological framework <input type="radio"/> Case study	<input checked="" type="checkbox"/> Temperate <input checked="" type="checkbox"/> Undefined <input type="radio"/> Tropical	<input checked="" type="checkbox"/> Mixed farming <input checked="" type="checkbox"/> Various <input type="radio"/> Agroforestry <input type="radio"/> Arboriculture	<input checked="" type="checkbox"/> All three <input type="radio"/> Additional dimension <input type="radio"/> Environment <input type="radio"/> Environment and economic <input type="radio"/> Environment and social	<input checked="" type="checkbox"/> Farm <input type="radio"/> Field <input type="radio"/> Territory

Table 1 - Filters applied to the criteria found in Table D of the appendices of Soulé et al. (a red circle indicates that the methods are not taken into account if the criterion mentioned is found)

After applying these filters, the pool of methods is reduced to 26 methods (see Figure 1, "pre-filter according to Soulé et al."). This number is still too high: these methods must be added to those provided by EUfarms before going through selection stages that involve more in-depth research on the methods. As these research stages are quite time-consuming, it was decided to limit the initial pool of methods to be selected by including in this pool methods that best meet EUfarms' expectations.

By quickly reviewing the 26 methods remaining after filtering, new selection criteria emerge and a second filter is applied (see Figure 1, "Additional searches"):

- The method is not selected when there is insufficient documentation available or when it is not accessible (foreign language);
- If the method costs money: the objective is to have a method that is easy to access and does not incur any (or only minimal) costs;
- Even if several workshops are taken into account, if the method is too focused on one of them, it is not relevant (as in the case of DURABEEF, which is very focused on livestock farming).

Following this second stage of selecting methods from the pool provided by Soulé et al., it appears that only four methods meet all the criteria of the pre-filter and additional research.

1	2	3	4
IDEA	Diagnosis of small-scale farming	DiagAgroEco	Sustainability assessment of the Sustainable Agriculture Network

Table 2 - Methods from the Soulé et al. pool that were ultimately selected

It should be noted that (2) and (4) (see Table 2) also belong to the EUfarms pool and that (1) appears there in association with a second method (CARE). IDEA 4 without CARE is therefore added as a separate method in the study, along with DiagAgroEco.

The pool of methods used in our study therefore consists of 21 methods (see Figure 1, "Initial pool"): 19 methods from the EUfarms pool and 4 methods from the pool of (Soulé, et al. 2021). Two methods are present in both pools.

4.2.2 Exclusion grid

After the initial pool was established, an initial grid known as the "exclusion grid" (see Appendix 4) was created in order to exclude methods that did not meet the essential criteria for evaluating EUfarms operations. These criteria simply serve to avoid irrelevant methods, i.e., methods that are unsuitable for the farms targeted by EUfarms. It should be noted that some criteria overlap with the pre-filters discussed above. Nevertheless, they must appear in the exclusion grid so that the methods specific to the "EUfarms Pool" are properly submitted (Figure 1).

These criteria are:

- The scale of the assessment must be that of the farm;
- The assessment must be multi-criteria and cover sociological, economic, and environmental aspects
- Its degree of application must be generic (not only applicable to a case study);
- The production taken into account may be animal or plant-based: farms in the EUfarms network have several production workshops, each of which must be taken into account;
- The method does not only have a certification objective, because in this case, the methods only return a binary result of certification attribution;
- The method's architecture contains indicators.
- The method must not be "opaque": when reading the documentation available on the method, the information must be clear and explicit.

If a criterion is not validated for a method, it is set aside and the rest of the grid is left blank. The exception to this is the opacity criterion, as this corresponds more to a personal feeling, which, if the method is selected, will be evaluated by other readers of the documentation. This made it possible to exclude certain methods without having to understand their content in detail, given that it is very time-consuming to read all the technical documentation specific to each of them.

The exclusion criteria that led to the most methods being excluded were:

- Study scale = operation: 3 methods did not meet this criterion.
- Degree of application: 3 methods were not adaptable to situations other than those described in the tool documentation.

After applying the exclusion criteria, 8 methods were selected: Care + IDEA4, IDEA4, Open Compass, TAPE, Sustainability Diagnosis, Oasis, Smallholder Farming Diagnosis, Diagagroeco (see Figure 1, "Reduced pool").

4.2.3 Method comparison grid

The next step in the process focuses on identifying the most relevant methods from those selected in the previous stage. To do this, the first step was to construct a comparison grid for the methods (see Figure 1, "Comparison grid"). The various elements of comparison (method characteristics) are listed in the following table:

CONTEXTE DE L'ETUDE								
Informations générales étude					Objectifs / Finalités	Livrable	Interprétation des résultats	
Type de production agricole	Prise en compte de la transformation	Echelle spatiale d'étude	Echelle temporelle d'étude	Type de structure	Certification, Sensibilisation, Apport de connaissances, Diagnostic etc...	Format	Conseil sur les pratiques ensuite ? Comparaison avec des valeurs de référence ?	

CONTEXTE DE L'ETUDE								
Modalité d'évaluation								
Temps nécessaire	Nationalité et application zonale ?	Qui a créé l'outil ?	Age et nombre de versions	Qui évalue ?	Destinataire	Moyens financiers nécessaires	Moyens humains à déployer	

CONTEXTE DE L'ETUDE									
Modalité d'évaluation									
Type de collecte de données	Accès à la donnée	Qualité des sources	Données de référence	Architect ure des données	Modalité d'agrégation	Niveau final d'agrégation	Type d'indicateurs	Pondération	Compensation

INDICATEURS										
Approche générale	Performance économique			Social		Environnement				Bien-être animal
Quelle définition et échelle de la durabilité ?	Indicateurs économiques	Prise en compte de la transformation	Prise en compte de synergie entre productions agricoles	Bien-être au travail	Insertion territoire	Eau	Atmosphère	Sol	Ressources	Biodiversité

Table 3 - Method comparison criteria (simplified, complete table in Appendix 5)

For each method listed in Table 3, the characteristics of the method have been explained in as much detail as possible so that they can be compared in a nuanced way (and not just with binary criteria such as

"yes/no"). For example, for characteristics of the "indicator" type (see Table 3), opposite each evaluation criterion, the number of indicators relating to the criterion has been entered, showing which comparison criterion has been emphasized (for example, if there are 8 biodiversity indicators in IDEA4, in the IDEA4 column, for the "Biodiversity" criterion, "8" is written, showing the weight given to biodiversity in IDEA4, see Appendix 5. This grid was checked and modified with Nicolas Guilpart in order to refine the characterization of the methods. After completing the grid and discussing it with Emilie Rousselou (sponsor) and Maude Quinio (educational advisor), the results of the method selection are shown in Table 4. Five methods were retained (see Figure 1, "Field-testable pool"). **Their detailed description is provided in section 5.1.** Table 4 shows only the reasons for selecting or rejecting the methods.

Table 4 - Results of method selection based on the comparison grid

Methods not selected	Reasons for non-selection
Care + IDEA4	With the IDEA4 method characterized in the grid, consideration is given to adding the Care method to assess sustainability. The limitation to the use of Care that emerges is the fact that it requires an evaluator who is knowledgeable in accounting in order to translate social and environmental impacts into monetary terms.
Smallholder Farming Diagnosis	To access the methodology and results of the method, you need to purchase the detailed manual, which costs €30. In addition to the cost, this means spending extra time obtaining the manual and evaluating the method. The strategy is therefore to reject it in favor of selected methods that are free and suited to EUfarms' expectations.
Diagagroeco	It was quite difficult to find accurate information on the construction and thinking behind the tool. A user tutorial is easily found online, but it does not mention aggregation methods, the presence of weightings, or the implication of offsets in the final result. In order to obtain more information on the indicators, it seemed necessary to carry out the diagnosis, which takes time. considerable investment required for its characterization. The strategy adopted was therefore to replace it with methods for which documentation is more readily available and comprehensive.
Selected methods	Reasons for selection
IDEA4	This method is free and open source, all information is available online, and new versions are released regularly. The time required to The method involves three hours of data collection, plus the time needed to familiarize oneself with the method and analyze the documents provided by the operator to supplement the technical data. No special training is required to carry out the assessment. The three dimensions of sustainability are given equal consideration. The indicators are evenly distributed across the sustainability criteria, with a relevant emphasis on social issues. The final aggregate score is based on the lowest-performing of the three dimensions, which allows the weaknesses of a structure to be taken into account in the result. The deliverable consists of mind maps and scores.
Open Compass	Open Compass is a free and recent method. Its accessibility is not clear in itself, but the link established between EUfarms and Farm For Good helps to clarify this. The time required to complete Open Compass is only half a day, involving an interview with the farmer. The number and distribution of indicators makes it possible to render accounts for the three dimensions of sustainability, with a focus on biodiversity. The deliverable consists of radar charts accompanied by recommendations based on comparisons of the results with thresholds calculated by Farm For Good.
TAPE	TAPE is available free of charge online with documentation that clearly outlines the structure and components of the method. Its international nature ensures that a wide variety of systems are taken into account. The survey can be completed online by the farmer themselves in a maximum of four hours, plus the time required for analysis and feedback from advisors, followed by a group discussion with the farmer. The method works well. accounts for sustainability dimensions with an emphasis on social aspects. TAPE also takes into account processing activities, which are a mandatory part of farms in the EUfarms network. There is no compensation in the results, which means that no additional weighting analysis is required in the result. The deliverable consists of radar charts as well as a more descriptive section on the farm with a 3-color rating (red, green, yellow).

Oasis	Oasis is a methodology that is available free of charge, and the documentation is freely accessible. It has been developed at European level, making it suitable for the
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	<p>EUfarms network. It is carried out through an interview with the farmer, which takes between half a day and a full day. The person using Oasis normally undergoes training offered by the organization that created the method, but the entire assessment and guide are available online. All aspects of sustainability are addressed equally. The aspects of the method are aggregated into a final score using an average of the scores, and the deliverable then returns the single final score as well as radar charts for each aspect of the method. The method also takes into account transformation, which is present in all farms in the network.</p>
Sustainability diagnosis	<p>This method can be downloaded free of charge online by submitting a request on the CIVAM website, which provides an assessment document and user guide for the method. To complete it, an interview with the farmer and an analysis of the accounting documents. This means that a day on the farm is needed to carry out the assessment. All aspects of sustainability are taken into account, with a focus on the environment rather than other aspects. The CIVAM method addresses the processing workshop, which contributes to the diversity of workshops on farms in the network.</p>

4.3 Application of methods in the field

The previous method selection process identified five multi-criteria assessment methods with high potential for application to farms in the EUfarms network: IDEA 4, Oasis, TAPE, Sustainability Diagnosis, and OpenCompass (see Figure 1, "Field-testable pool").

In order to fully understand the content and implementation of each of these methods, they need to be put into practice on the same farm. This allows us to understand how the methods are implemented in the field, but also to compare the results on the same farm and thus perceive the differences between methods in the presentation of these results. For OpenCompass, the method lacked clarity at first glance, which meant that a meeting had to be organized with Farm For Good in order to better understand the characteristics of this method. In addition, it had been applied in 2021 on the test farm. For these two reasons, it was not directly applied in the field but was reworked using the data collected for the other methods.

The other four methods were put into practice at the "Ferme Bio de They" farm owned by Mr. and Mrs. Devillairs in Sorans-lès-Breuray in Haute-Saône (Bourgogne-Franche-Comté), who are pioneering members of EUfarms. This farm is a mixed farming operation covering more than 200 hectares of UAA (mainly pasture and hay meadows and wheat for flour production) with numerous livestock facilities (pigs, dairy cattle, rabbits, chickens). The farm also has an on-site processing facility (butchery, charcuterie, flour mill) and sells its products directly to the public. The farm also has a tourist lodge and a methanization unit.

To avoid repetition and make the interview feasible within the farmer's availability (1.5 days), a single questionnaire was prepared in advance so that it could collect all the data needed for the four methods. To achieve this, the Oasis interview guide was supplemented with the information required for the IDEA4, TAPE, and CIVAM Sustainability Diagnosis methods. The necessary documents (such as accounting records, invoices, statements, and various administrative supporting documents) were also requested in advance in order to prepare for the interview as thoroughly as possible.

On January 9 and 10, 2025, a tour of the farm, an in-depth interview in two parts (4 hours followed by 3 hours), and social gatherings took place in Sorans-lès-Breuray. These events provided an opportunity to gain a thorough understanding of the challenges facing the farm and how it operates, as well as to collect all the data, impressions, and information needed to complete the four methods tested on the farm. The

processing of all this data was the subject of subsequent individual work, organized by method. It shows the results of applying the methods to the same farm using the same questionnaire, both in terms of the method's performance and the analysis of its implementation. A second series of tests of these methods on a second farm in the EUfarms network was planned in Courances (Essonne, Île-de-France) to confirm the results of the application of the methods in Sorans-lès-Breuray. However, given the time constraints imposed by the engineering project schedule, the time required to carry out such an interview, and the availability of farmers during the busy sowing season, this was not possible and the test will be postponed until a later internship.

4.4 Obtaining results from methods

4.4.1 Processing of collected field data

The implementation of data processing methods was the subject of significant learning: understanding all indicators, different levels of aggregation, the philosophy behind the methods, the transfer between data collection and work tools, etc. Beyond a thorough understanding of the methods, it was also necessary to master spreadsheets, forms/fill-in fields, output representations, and the paths between data entry and result visualization. The results by method for the tested operation and the implementation analysis are presented in section 5.1.

One of the issues encountered at the Sorans-lès-Breuray farm is the coexistence of a limited liability company (SARL) managing processing and sales in the farm shop and a agricultural cooperative (SCEA) managing agricultural production. This has led to choices having to be made in terms of economic analysis regarding what is taken into account for expenses and income, particularly in accounting.

Discussions were held with the various method designers to clarify certain points (particularly regarding accounting) or to retrieve data (2021 assessment data for OpenCompass and regional data for OASIS).

4.4.2 EUfarms grid

Following this, a grid summarizing the expectations of the sponsor EUfarms was provided (see Figure 1, "EUfarms Grid" and Table 5). These expectations correspond to criteria relating to soil regeneration, biodiversity, on-farm slaughter, work organization, sales, local processing, regional integration, and related issues. For each of the methods applied, the grid was completed as follows: a score of 0 was given if the expectation was not present in the method (not taken into account or not apparent at any point), a score of 1 if the expected outcome is partially taken into account (i.e., one or more aspects are considered but the overall expected outcome does not appear or emerge in the results of the method as specified by the sponsor), and a score of 2 if the expected outcome is clearly present and emerges in most of its aspects in the results of the method.

Welcoming biodiversity	Soil regeneration	Water cycle and infrastructure	Hedges and agroforestry	Animal welfare
On-farm slaughter	Preservation of added value	Local sales	Diversity of activities	Ability to pass on knowledge
Feeding the region	Proposal of activities	Women on the farm	Farm participation in local and national networks	Product accessibility for all: affordable prices
Fragmented plots... or a single block?	Number of different economic structures on the farm's land	Citizen investment to enable the purchase of the farm	Multiple activities outside the farm	Located in a protected area?
Balanced governance	Distribution of employees, apprentices, partners, self-employed workers, etc.	Relative "independence" from subsidies in particular	Who invests in the farm ?	Job creation
Average weekly working hours per farmer	Ability to listen	Opportunities for training and knowledge transfer	Time dedicated to passing on experience	Inspiration generated by the farm

Table 5 - Modified EUfarms criteria grid (green = ecosystem regeneration; pink = economic return; orange = social return; yellow = inspirational return; white = unclassifiable)

4.4.3 Comparative analysis

Finally, based on the results obtained by applying the methods to the Sorans-lès-Breuray farm (graphical and analytical representations), the points raised regarding the implementation of the methods, and the correspondence between the client's expectations and the elements captured by the methods, it was possible to carry out a detailed comparative analysis of these results (see Figure 1, "Opinion of the pool working group") and to present the advantages and disadvantages of these methods in the best possible light in order to assist in the decision to select one of these methods for evaluating the farms in the EUfarms network.

5 Results of selected methods and comparison

In this section, comments on the methods should be viewed in the context of EUfarms' expectations. No judgment is made on the methods themselves.

5.1 Results of the selected methods

5.1.1 CIVAM method

Philosophy of the method and context of creation

CIVAMs (Centers for Initiatives to Promote Agriculture and Rural Areas) are groups of farmers and rural residents who work collectively toward agroecological transition. In the 2000s, the issue of farm performance in terms of sustainable development gained momentum and led to the creation of the sustainability assessment studied in this report, a tool that aims to be reliable, accurate, transparent, simple, and quick to implement. CIVAM's agroecological orientation is a strong point for the method, which is therefore intended to be adapted to farms using this agricultural approach.

Structure of the method

Two documents are available: a diagnostic tool (spreadsheet) and a user guide. There is no pre-designed interview guide, however, all quantitative indicators are described in sufficient detail to prepare for the interview.

The method is organized around the three dimensions of sustainability. Each dimension consists of seven indicators, some of which are divided into sub-indicators that are then aggregated to give a value to the main indicator. The indicators are mainly quantitative, with a few qualitative indicators in the social and biodiversity sections.

The preliminary work required before using the method therefore involves understanding the indicators, mastering the spreadsheet, and distinguishing between the information to be gathered during the interview and that obtained from the farm's documents.

Results of field application

For each dimension, a table lists the associated indicators, their values, and the scoring grids used to assign a final number of points to each indicator. Based on these tables, radar charts are created for each dimension (see Figure 2).

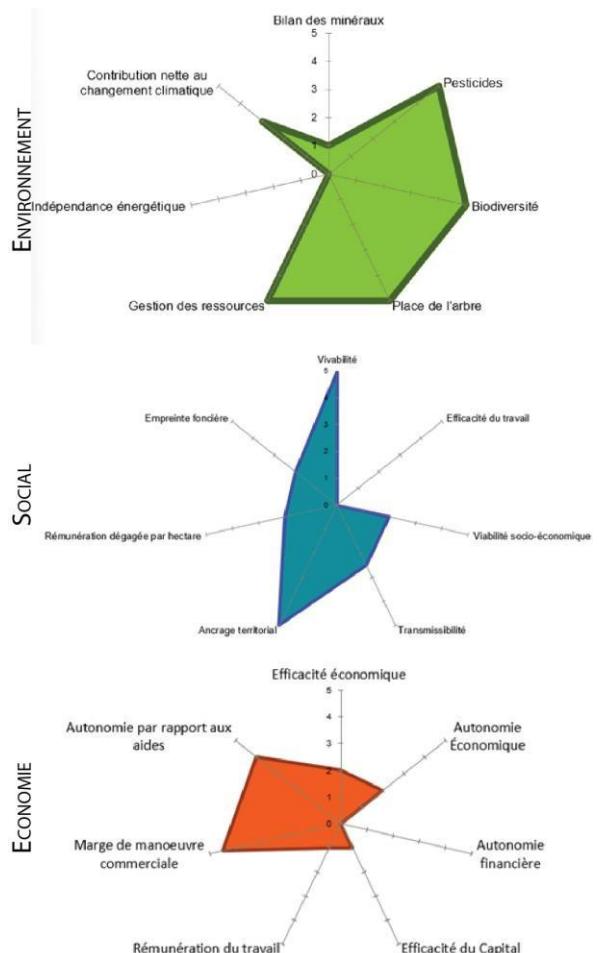


Figure 2 - CIVAM results

- “Environment” dimension:

For the They farm, the pesticide rating reflects the very low use of pesticides. Agricultural practices and the extensive hedgerows promote biodiversity. Resource management in this method refers to soil management, which is optimized through soil cover and long crop rotations. Energy independence is rated very negatively for the They model because the indicator only takes consumption into account and not the farm's own production. Finally, the net contribution to climate change is average due to the farm's carbon emissions (mainly enteric fermentation from cattle).

- Social dimension:

The operator is entirely satisfied with his quality of life. He has chosen to put down roots in the area by offering farm stays and locating production, processing, and sales within the region. The other indicators take into account an economic perspective, which is greatly affected by the farm's debts. As a result, the farm is entirely ready to be transferred but appears difficult to transfer due to these debts.

- "Economy" dimension:

The results of the economic assessment of the They farm are heavily impacted by the farm's debts due to numerous investments. On the other hand, the farm is self-sufficient in terms of subsidies, which suggests economic efficiency once the debts are repaid. In addition, the diversity of activities provides commercial flexibility, indicating that the farm is not very sensitive to the economic climate of its main activity.

Advantages and disadvantages

The sustainability assessment is a fairly effective method to use. The spreadsheet structure is clear and the guide helps you prepare for the interview. The tables and graphs provided are self-explanatory. The user guide helps you interpret the results correctly.

The results are quite harsh because they do not take into account certain characteristics of large, diversified farms:

- Energy independence should take into account the farm's capacity for self-production of energy.
- The economic analysis should highlight the debts, of course, but also reveal the potential of the farm that has taken on debt for optimal diversification and autonomy. In addition, the economic analysis should take into account the possibility of the presence of several structures and therefore several accounting systems that are not always consolidated. For the They farm, this was a major obstacle in analyzing the results and accounting knowledge to determine and apply the strategy proposed by S. Girard.
- Finally, the social aspect is heavily focused on the economic aspect, which is greatly impacted by debt in this case. The rest of the social dimension mainly boils down to opening the farm to the public and integrating it into the local area. This could take into account the well-being and diversity of employees and emphasize the number of secure jobs.

The CIVAM method therefore appears to be a relevant method for multi-criteria assessment, but at first glance seems to lack the detail needed to highlight the characteristics of farms that are quite different from others, due to their involvement in agroecology and their desire for diversification.

5.1.2 IDEA 4

Philosophy behind the method and context of its creation

IDEA 4 is an assessment method created by INRAE in 2020. The first method was published in the 2000s, and several versions have expanded the types of farms taken into account. The idea behind IDEA 4 is to give equal weight to the three aspects of sustainable development. However, it should be noted that fairly standardized accounting is necessary to successfully complete the economic section. A simple half-day interview is sufficient for the agroecological and social sections. It is also noteworthy that the IDEA 4 method is completely open source, with calculators and detailed, sourced instructions (INRAE, IDEA 4 Method 2022). This method has French reference data on a dedicated website (INRAE, All IDEA Tools 2022) but is theoretically adaptable to any system.

Hierarchical structure of the method

Figure 3 shows the structure of IDEA 4. It is important to note that the indicators themselves are calculated from items. The method assesses sustainability as the lowest score of the three dimensions. However, the deliverable also shows the aggregated results by component on the one hand and by indicator on the other, which nuances the rather uninformative final score. The calculation of the indicators is explained in an appendix. This makes it relatively easy to link the information entered to the associated indicator.

Compensations are possible by intra-indicator items and at each aggregation level, details of which are always available in the results file. The indicators are also capped, which helps to prevent inter-indicator compensation (at the dimension level).

Results of field application

The results by dimension, component, and indicator are shown in Figure 4Error! Reference source not found.. The single final score provided by IDEA 4 is not very informative, but graphs by component and indicator allow for further analysis (figure). With regard to the components (and indicators, respectively), the shaded bars (see Error! Source of reference not found.) show the maximum score achievable for each component (resp. indicator). These maximums are different for each (resp. each) and could be used to create a radar chart (a common way of displaying results in other methods but not directly implemented in this one). The scores (and maximum scores) are calculated using decision grids supported by scientific sources available in the method documentation (INRAE, IDEA 4 Method 2022).

Advantages and disadvantages

The main advantage of IDEA 4 is the reliability of the method it proposes. The scientific sources are abundant, detailed, and accessible. The tool and method are intuitive and available online. There is also a web platform for referencing and comparing regional averages (not used in this study due to lack of time). It is also noteworthy that several versions (over 20 years) have been used to test the method. The range of topics covered is broad and clearly highlights the areas of interest to EUfarms (see Table 5 and Appendix 6).

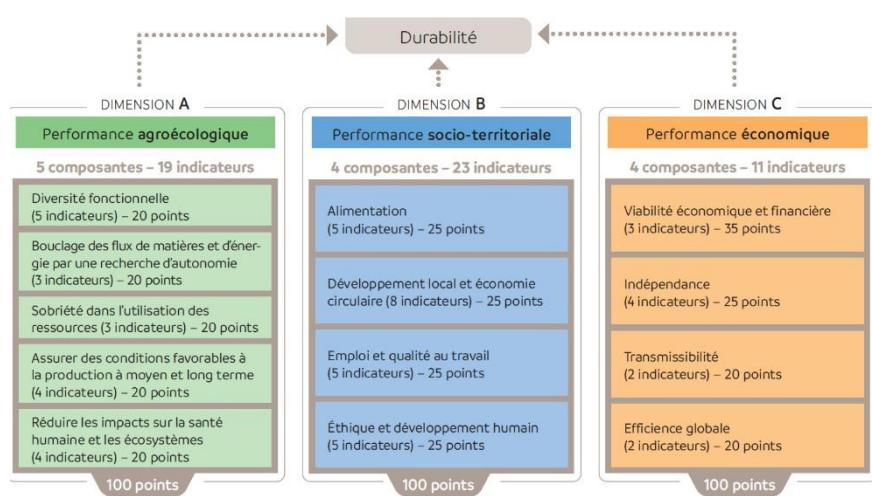


Figure 3 - IDEA 4 hierarchical structure (INRAE, IDEA 4 Method 2022)

However, there are some drawbacks to the EUfarms project. The references (particularly on the web platform but also within the method) are currently focused on France. In addition, arbitrary choices (albeit scientifically justified) are made. For example, gross sobriety is sometimes considered without taking into account the production context (quantity produced, OTEX, etc.). The indicator "Water conservation" (see Figure 4), for example, considers that withdrawing 10,000 m³³ per year from groundwater is always problematic without taking into account the pressure exerted in relation to the territory (the argument is based on the median French water withdrawal in agriculture (INRAE, IDEA 4 2022 method)).

The main drawback is the time and complexity involved in collecting data. It takes between half a day and a full day to conduct interviews. In addition, due to the complexity of the structures targeted by EUfarms (multiple activities and therefore often multiple legal entities), the accounting documents of the various structures must be consolidated in order to address the economic dimension. This takes time (a

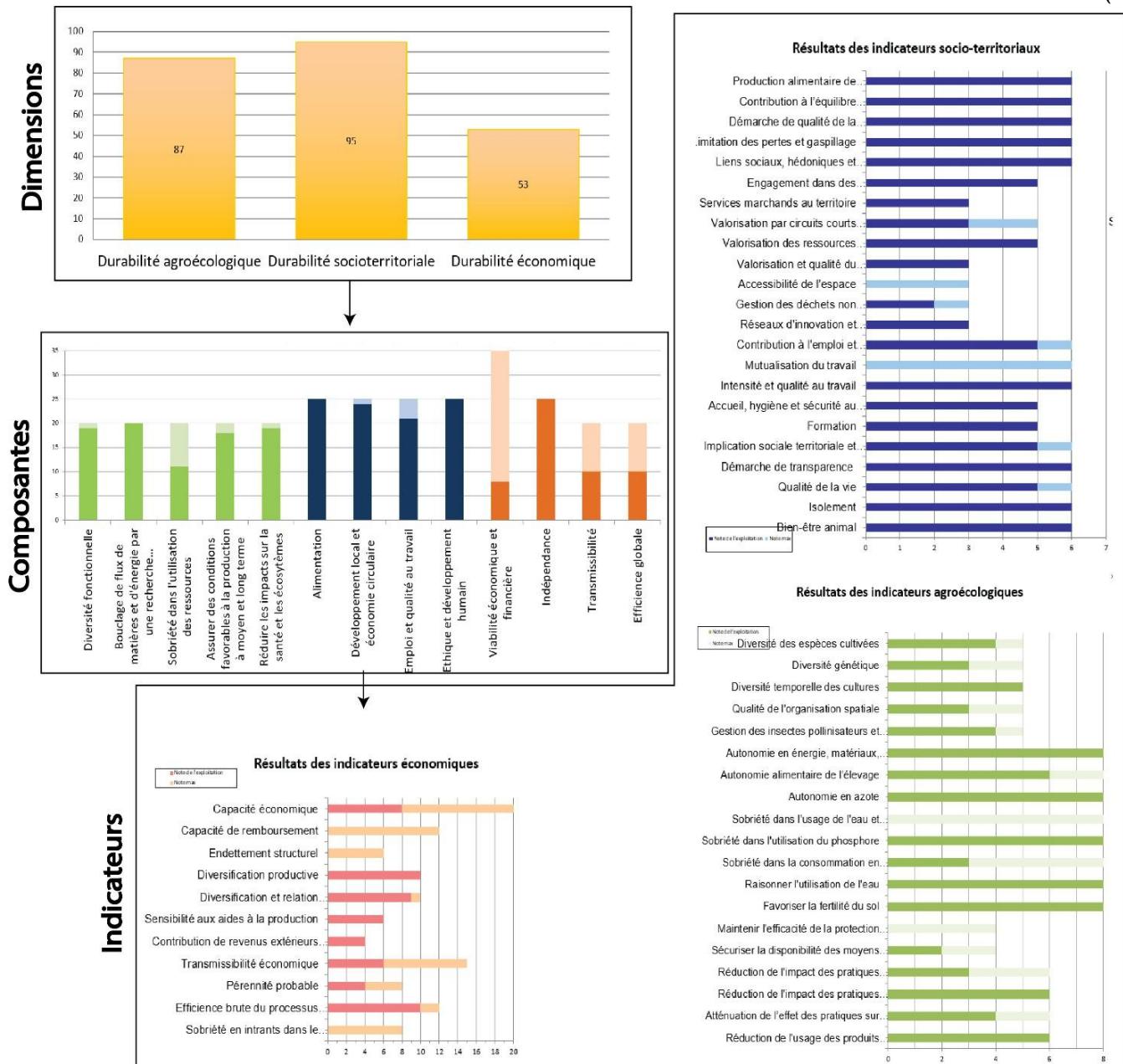


Figure 4- IDEA 4 results for the farm evaluated

additional day) and fairly advanced accounting training (provided that reliable and detailed accounting is available).

reliable and detailed accounting system). In addition, it involves arbitrary choices when considering the overall structure (e.g., which workshop from which structure should be linked to the farm?).

5.1.3 OASIS

Philosophy of the method and context of creation

OASIS is a multi-criteria assessment method created in 2021 by the Agroecology Europe association (Agroecology Europe 2022). This association aims to promote agroecology in Europe through various actions and programs (research, lobbying, training, webinars, etc.). OASIS therefore aims to support farmers in their agroecological transition by offering them an assessment of their progress in this transition. The starting point for OASIS is that there are already many methods for assessing the sustainability of food and agricultural systems (SAFA, MESMIS, SAFE, RISE, etc.) and that it is therefore appropriate to draw on existing methods to recreate a comprehensive tool that is suitable for assessing the level of transition.

agroecological approach to farming. The method is based on a holistic definition of agroecology as "the redesign of agroecosystems to function on the basis of ecological processes, encouraging interactions that enable the agroecosystem to sustain its own soil fertility, plant health, provide natural pest and weed control, and ensure crop productivity" (Agroecology Europe 2022). This assessment has several main concerns: to propose a method that can be carried out in a relatively short time, comprehensive, free, and robust enough to be applied in a diverse set of farms and contexts.

Hierarchical structure of the method

The OASIS assessment method is divided into five main dimensions: agroecological farming practices, economic viability, sociopolitical aspects, environment and biodiversity, and resilience. Each dimension is itself divided into different themes, which are in turn divided into several criteria.

All criteria are rated on a semi-quantitative scale from 1 to 5. The rating is determined using a benchmark based on one or more indicators. If the benchmark is based on quantitative indicators,

CRITÈRE	OPTIMISATION DU BILAN DE CARBONE DU SOL
INDICATEURS	Type de technique de travail du sol, proportion de sol couvert de matériaux biologiques, niveau de diversification des rotations de cultures, combustion, compostage ou enfouissement des résidus de cultures, utilisation d'engrais organiques ou chimiques, type de système de pâture et d'élevage en place.
1	Surpâturage extrême et/ou intensif et, pas de couverture du sol, brûlage régulier des résidus de culture, pas de rotation des cultures, pas d'utilisation d'engrais organiques
2	Surpâturage et/ou travail intensif du sol, quelques sols couverts, rotation des cultures très simplifiée, utilisation rare d'engrais organiques, souvent brûlage des résidus de culture
3	Léger surpâturage/travail du sol selon les bonnes pratiques régionales, cultures de couverture/engrais verts occasionnels, rotation des cultures, brûlage occasionnel des résidus de culture
4	Bonne gestion du pâturage, travail de conservation du sol, 70 % du sol couvert, longue rotation des cultures, utilisation fréquente de compost et de fumier, cultures de couverture annuelles, présence de quelques arbres, décomposition en surface ou par compostage des résidus de culture
5	Gestion holistique des pâtures en rotation, pâtures améliorées avec des espèces à système racinaire profond, semis direct ou semis minimal, décomposition en surface ou compostage des résidus de culture, utilisation de prairies temporaires dans la rotation des cultures, agroforesterie, cultures de couverture pérennes (liste non exhaustive)

CRITÈRE	HAUT NIVEAU D'AUTONOMIE DES EXPLOITATIONS AGRICOLES
INDICATEURS	Dépendance à l'égard des fongicides et bactéricides commerciaux, mesurée à l'aide de l'indice de fréquence de traitement (IFT) pour les fongicides et bactéricides commerciaux.
1	L'IFT est supérieur à 7
2	L'IFT est compris entre 5,1 et 7
3	L'IFT est compris entre 3,1 et 5
4	L'IFT est compris entre 1,1 et 3
5	L'IFT est compris entre 0 et 1

Figure c- Examples of two criteria from the OASIS method

4 L'ENVIRONNEMENT ET LA BIODIVERSITÉ			
IMPACT ENVIRONNEMENTAL	4.1.1	Pollution minimale	pg. 57
	4.1.2	Optimisation du bilan de carbone du sol	pg. 58
	4.1.3	Minimisation de l'érosion des sols	pg. 60
	4.1.4	Minimisation de la salinisation des sols	pg. 62
	4.1.5	Réduction du compactage des sols	pg. 63
IMPACT SUR LA BIODIVERSITÉ	4.2.1	Maximisation des réseaux écologiques	pg. 64
	4.2.2	Agriculture à haute valeur naturelle (HVN)	pg. 65
	4.2.3	Maximisation de l'agrobiodiversité	pg. 67

numerical references are given to assign a score from 1 to 5. Some indicators are to be compared with regional average values. If the reference framework is based on qualitative indicators, each score on the scale corresponds to a situation described in the OASIS guide.

Results of field application

The OASIS assessment of the They organic farm gives an **overall score of 4.43/5 for the progress of its agroecological transition**. The assessment of the farm is therefore very positive and indicates a very high level of agroecological transition. In terms of "Environment and biodiversity" and "Agroecological farming practices," the farm scored 5/5 and 4.6/5, respectively (see Appendix 3). This demonstrates the very low impact of the farm's agricultural practices on the ecosystem, its ability to regenerate the ecosystem, and the very high adoption of agroecological practices (in particular the presence of numerous multi-species grasslands, compliance with organic specifications, the practice of

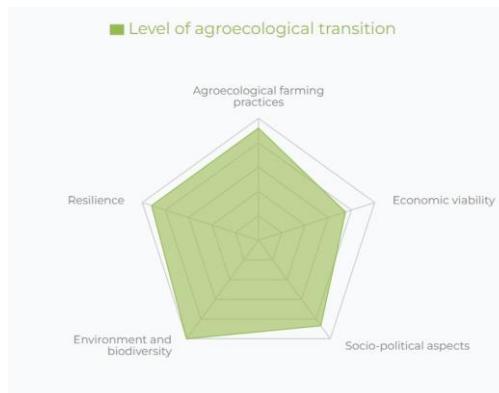


Figure 7- Example of a radar chart rendered by
OASIS

The farm stands out for its high level of integration within its local area, offering a diverse range of profitable local businesses and creating jobs through processing and farm sales. However, the farm is characterized by very high capital intensity in terms of buildings and machinery. In addition, the partners are poorly paid and not on a regular basis. This lowers certain criteria quite significantly and explains the difference in rating compared to other dimensions.

Advantages and disadvantages

Developed by Agroecology Europe, OASIS was designed to be applied across the entire continent, which is particularly well suited to EU farms. In addition, the method is highly adaptable to a wide variety of farms, which may have very diverse activities, including on-farm processing and other services. OASIS offers an interesting approach to farm resilience, i.e., their ability to withstand various climatic, political, or economic crises, by dedicating an entire dimension to this issue. This approach takes into account the notion of robustness, which is important in the needs expressed by EU farms. In terms of its application, OASIS is simple to implement. The method comes with a detailed guide that allows interviews to be conducted in a smooth and humane manner, an intuitive online tool for data processing, and the information to be collected is easily accessible from the interview with the farmer.

However, most indicators are based on farmers' perceptions or on a practice-centered approach. There are therefore few indicators for measuring the actual effects of farming activities on different aspects of the environment or on the ability to be economically viable. In addition, some indicators need to be compared with regional averages. These regional averages are to be determined by the person conducting the assessment, even though this type of data is difficult to find on the internet for specific regions or countries (e.g., determining the regional average expenditure on fertilizers).

generalized dynamic rotational grazing). There is therefore little room for improvement in these areas. In terms of resilience, the farm also scores an excellent 4.55/5 (see Appendix 3). The farm is therefore highly resilient to climate and economic crises due to the adoption of agroecological practices, the high level of diversification of activities and outlets on the farm, and the very high autonomy of the production process with regard to inputs. With regard to the "Socio-political aspects" and "Economic viability" dimensions, the farm obtained scores of 4.34/5 and 3.73/5 (see Appendix 3). The scores are good, but there are some interesting areas for improvement.

5.1.4 Open Compass

Philosophy behind the method and context of its creation

The creators of the method are a collective of associations and agri-food companies, including Farm For Good, mentioned above. The entire collective supports sustainable agriculture and considers it essential to carry out objective assessments of agricultural practices, which then serve as a guide for decision-making. Their aim is to make the Open Compass accessible and understandable for free use.

Structure of the method

The method focuses on four themes consisting of indicators (available at (Open Compass Development Group n.d.). The *Living Soils* theme presents indicators relating to organic matter, cover, tillage, and soil biodiversity. In the *Biodiversity and Water* theme, conversion to organic farming

, accompanied by a specially created indicator specially created indicator, the ecological network, which

takes into account the natural elements put in place on the farm to preserve flora. Finally, the theme of *Autonomy and Resilience* makes it possible to assess autonomy in terms of animal feed, nitrogen, and energy expenditure. Finally, the theme of *Profitability and Efficiency* consists of indicators for yield, input efficiency, and average gross margin, as well as the perfalim indicator, which shows the number of people fed per hectare.

Results of the application in the field

Open Compass has not been tested directly in the field: we needed a presentation by the creators to better understand this method and have access to the evaluation documents. In addition, an evaluation had already been carried out in 2021, which then allowed us to add the data from 2023.

Some of the results are quite surprising. The humus balance is not rated highly, which may be due to the evaluator not taking input data into account properly. Open Compass's advice is therefore to return organic matter to the soil. However, other evaluations suggest that too much organic matter is being added. Crop diversity is poor, which is due to the fact that the They Farm mainly has grassland and few other crops. However, the farm's temporary grassland is composed of more than 30 different species, which should be taken into account. The ecological network also receives a poor rating. It is noted that "agri-environmental measures are very detrimental to biodiversity." This is surprising given the extensive hedgerows and the wide diversity of species cultivated in the grasslands.

The calculation of the result is ultimately rather unclear and does not reflect the actual situation of the farm. Ultimately, the tool is very crop-oriented. This means that the They farm, which practices mixed farming, cannot be evaluated in its entirety and according to its specific characteristics.

Advantages and disadvantages

The spreadsheet contains highly technical data, which makes it difficult to complete. However, the results are surprising given the agroecological facilities available on the farm evaluated. Furthermore, the absence of social aspects in the evaluation and the lack of economic indicators make the evaluation incomplete in the case of They's farm.

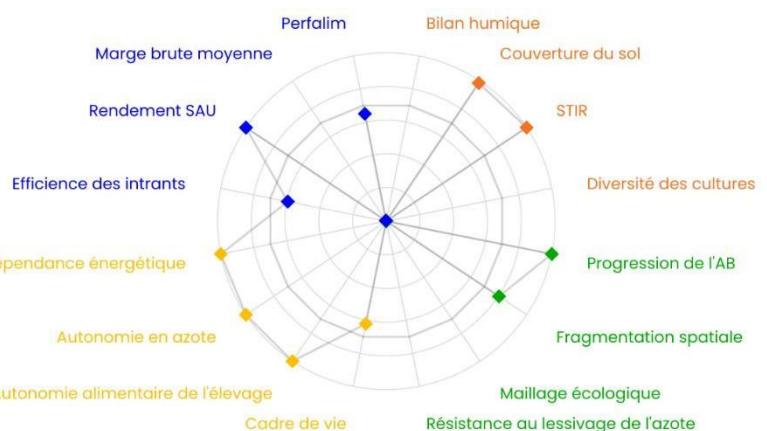


Figure 8- RADAR graph rendered by Open Compass

Finally, the Open Compass website (Open Compass Development Collective n.d.) is not fully up to date. This means that not all indicators are described, and some are still being developed, such as the IFTs. As a result, information on the method is rather difficult to access.

5.1.5 TAPE

Philosophy of the method and context of creation

TAPE (*Tool for Agroecology Performance Evaluation*) is a multi-criteria assessment method developed by the FAO (Food and Agriculture Organization of the United Nations). It was created in response to a growing need for standardized assessment tools that can be used to analyze and compare the impact of agricultural practices on environmental, social, and economic sustainability. The FAO designed it to support public policy by providing data under the FAO umbrella and local initiatives aimed at transitioning to resilient and inclusive food systems.

TAPE is based on a systemic approach to agroecological assessment, incorporating the ten elements used by the FAO to define agroecology (the definition on which EUfarms is based): Diversity, Synergies, Efficiency, Resilience, Recycling, Co-creation and knowledge sharing, Human and social values, Food culture and traditions, Circular and solidarity economy, and Responsible governance. This approach means that the assessment is not limited to productivity criteria alone, but also incorporates dimensions such as social justice, sustainable resource management, and farmer autonomy. Due to its international nature, TAPE is designed to be a flexible tool that can be adapted to local contexts (and therefore applied in extremely different systems, from subsistence to intensive farming) and is based on a participatory approach, where farmers are not simply subjects of study but actors in evaluation and change.

Method structure

The method is carried out in several stages, each of which produces a result: stage 0 defines the framework for the assessment, stage 1 provides an understanding of how the farms assessed operate by characterizing the agroecological transition according to the FAO's 10 elements, and finally, stage 2 measures the level of adoption of agroecological principles and progress towards agroecology through 10 performance criteria.

There is little compensation in the results. For stage 0, the deliverable consists of an identity sheet summarizing the operating framework. For stage 1, it is a radar chart giving a score out of 100 for each of the 10 elements of FAO agroecology, with each element having between 3 and 4 indicators (based on detailed multiple-choice answers). For stage 2, there is a table that summarizes, using indicators that aggregate a large amount of information, a "traffic light" approach (red, yellow, green) for 10 performance criteria (land tenure security, productivity, income, added value, pesticide exposure, food diversity, career prospects for young people, women's empowerment, agricultural biodiversity, soil health).

Results of field application

Results of stage 0: Results in Appendix 2.

These results present the identity of the farm being assessed and provide a clear and concise framework for the subject of the study: what constitutes the farm (grasslands, crops, animals, soil and climate conditions, etc.), the people who live and/or work there, and the context (environmental, political, social).

Results of stage 1 (Figure 9):

This stage clearly reflects the farm's progress on all fronts in terms of sustainability and its already fairly advanced progress in the agroecological transition (all 10 elements of FAO agroecology are above 2/3). The idea is to present the farm's strengths and weaknesses in a highly visual way

in order to take stock of the assets to

retain and areas for improvement. We could

Note that the few areas for improvement would be in establishing a system where synergies and interactions between components would be even more intense, which could be achieved through greater co-creation and knowledge sharing in decision-making and design.

Results of stage 2 (Figure 10):

Finally, this step summarizes a large amount of information on performance criteria, aggregating the level of adoption of agroecology principles within the farm. We can see that the farm demonstrates a high level of adoption of agroecology in a wide variety of areas. These results should be considered in relation to

with those in step 1.

While diversity scores highly when characterizing the farm, it is clear that agrobiodiversity has room for improvement, showing that the principle of integrating ever more biodiversity into the system can still be pushed further here. Similarly, the human and social values are one of the characteristics very developed on the farm, but the anchoring of women's empowerment on the farm seems to be improvable

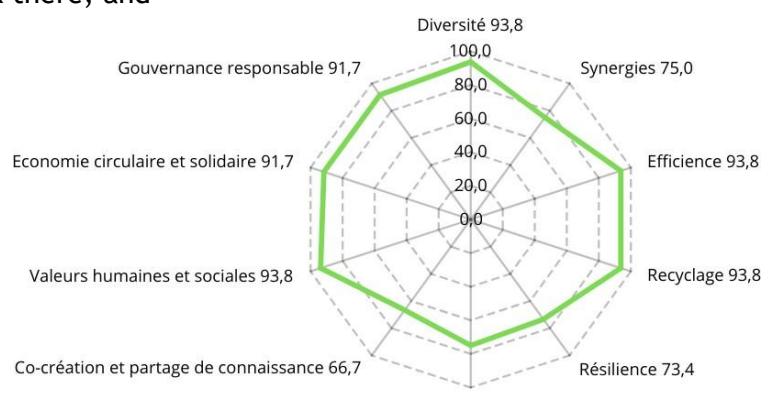


Figure 5 - Results of step 1 of TAPE

DIMENSION	CRITERE DE PERFORMANCE DE BASE	RESULTATS
GOUVERNANCE	Sécurité des régimes fonciers	○ Dispose d'un document officiel portant le nom du titulaire ET a la perception d'un accès sûr à la terre ET dispose d'au moins un droit de vendre/léguer toute parcelle de l'exploitation ou d'en hériter
	Productivité	○ Valeur de la productivité par hectare (2436,2€/ha) ≥ 2/3 de la valeur moyenne nationale de la production par hectare/an (1963,58€/ha, Agreste)
ECONOMIE	Revenu	○ Revenu (343 613,23€) > revenu médian des activités agricoles (données du Système d'information sur les moyens d'existence ruraux (FAO, 2019c))
	Valeur ajoutée	○ Valeur ajoutée brute (443 028,57€) > 1,2 x PIB agricole national par travailleur agricole (FAOSTAT)
SANTE ET NUTRITION	Exposition aux pesticides	○ Les pesticides chimiques ne sont pas utilisés ET des pesticides organiques ET/OU d'autres techniques intégrées de gestion des organismes nuisibles sont utilisés
	Diversité alimentaire	○ Score de diversité minimale du régime alimentaire (8) ≥ 7
SOCIETE ET CULTURE	Perspective professionnelle des jeunes	○ Score final de l'emploi et de l'émigration (92,9%) ≥ 70%
	Autonomisation des femmes	○ Score IAFA abrégé (60%) < 80% mais ≥ 60%
ENVIRONNEMENT	Biodiversité agricole	○ Moyenne entre indicateur "végétation naturelle, arbres et pollinisateurs" et les deux indices de Gini-Simpson (52,1%) < 70% mais ≥ 50%
	Santé du sol	○ Score moyen de santé du sol (4,33/5) ≥ 3,5/5

Figure 10 - Results of stage 2 of TAPE

Advantages and disadvantages

The main advantage of TAPE is its great flexibility and adaptability to different contexts. This makes it possible to include very different types of production in the assessment, which is often the case in EUfarms network farms. The design of the method and the choices made to "flag" the responses of the farmers surveyed, as well as the choice of information collected and its aggregation/presentation, are based on solid scientific references (FAO expertise).

However, the desire to simplify data collection, which is intended to be applicable in all contexts, leads to certain approximations in the handling of information, which can cause a discrepancy between the quality of information available to operators in a network such as EUfarms and the way in which it is processed. In fact, the processing of economic data is iterative, leading to the calculation of accounting information that could otherwise be available: the idea is to simplify the reading of the accounts by relying on simple information, but this work lacks a certain degree of precision regarding the economic context or the economic choices made by the farmer.

The environmental and social/purpose dimensions are very comprehensive and go into great depth on a wide range of sustainability issues (including soil health, agrobiodiversity, nutrition, food traditions, regional integration, the situation of women and young people, etc.).

The information collected is mainly qualitative or semi-quantitative, making the interview with the operator and the collection process fairly comfortable, intuitive, and smooth. The detail of the data is not altered in any way, and the method collects very accurate information. The difficulty lies in processing this data due to the lack of pre-built open source tools and the choices that the evaluator has to make based on the available information (choice of references, certain indicators, certain responses/classifications).

5.2 Comparison of methods

5.2.1 Content

Comparison of method structures and references

IDEA 4 is the method with the most scientific references. For each indicator, several scientific papers are cited to explain its creation and relevance. OASIS, being a synthesis of existing methods, has numerous references linked to scientific papers. In the case of TAPE, serious references are cited for each question, but many approximations and manipulations of the data are made in order to stay true to the spirit of the method, which is that the operator can be autonomous in their diagnosis. Thus, TAPE has less discernible scientific references than the two previous methods. For the CIVAM diagnosis, there are no scientific references given in the user guide, and some indicators are created without references to papers associated with their creation. Finally, in the case of Open Compass, numerous scientific references are available on the website. However, some do not lead to the stated source, which adds to the vagueness of the scientific references. In this case, IDEA 4 appears to be the most scientifically sourced method of the five, followed closely by OASIS.

The methods studied present quantitative and qualitative approaches that are relevant for application to farms focused on agroecology, social issues, and regional revitalization. However, certain orientations have been chosen in terms of the nature of the indicators. IDEA, CIVAM, and Open Compass are methods with a highly quantitative approach to evaluation, which leads to an approach

results/impacts of farming. However, CIVAM and Open Compass are much less comprehensive than IDEA 4 in their quantitative approach to assessment: they offer far fewer indicators in the three dimensions of sustainability.

OASIS and TAPE, on the other hand, take an approach focused on the farmer's perception, with indicators that are more qualitative than quantitative. Thus, the assessment focuses more on practices and perceptions than on quantifiable results.

In terms of the scope of the study, IDEA 4 is the most comprehensive method: it takes into account a great deal of detail across all dimensions of sustainability. The scope of the OASIS study is also very broad, but the information is collected in a slightly less precise, quantified, and detailed manner. TAPE and the CIVAM diagnosis provide even less detail than OASIS. In the case of CIVAM, there are seven indicators per dimension, which makes the method less comprehensive than IDEA. Finally, the method with the narrowest scope is Open Compass: this method focuses mainly on field crops, with quantitative indicators relating to technical itineraries, crop characteristics, and some economic information. The lack of study of social and general economic factors at the farm level is noticeable compared to other methods, in the case of an assessment of farms as diverse as those in the EUfarms network.

Comparison based on EUfarms values

Using the EUfarms Grid [Table 5 and Appendix 5], it was possible to match the elements that were important to EUfarms with those taken into account by the five methods tested in the field. As a reminder, this grid was organized into five parts: "Ecosystem regeneration: biodiversity, soils, resilient landscapes," "Financial/economic return: long-term income and autonomy," "Social return: caring for people on the farm, life in the region, employment, education, social ties," "Inspirational return: hope and purpose," and "Unclassifiable/Robustness theme." After adding up all the scores, the OASIS, TAPE, and IDEA 4 methods obtained a score of around 40, while the CIVAM Sustainability Diagnosis and Open Compass methods scored around 20. This already gives an idea of which methods are best suited to EUfarms' needs and values.

With regard to the category "Ecosystem regeneration: biodiversity, soils, resilient landscapes," the three methods OASIS, TAPE, and IDEA 4 give these themes a central place in their assessment methods. However, the way in which these themes are addressed differs. OASIS and TAPE measure the regenerative capacity of ecosystems using an approach focused on agroecological practices. IDEA 4, on the other hand, uses an approach that is more focused on effects. In addition, IDEA 4 adds a notion of pure sobriety in the use of inputs, which differs from the approach focused solely on efficiency and autonomy in OASIS and TAPE. The Open Compass and CIVAM methods only partially address this issue. Many important criteria are not taken into account, such as animal welfare or the consequences of tillage in the CIVAM sustainability assessment.

With regard to the category "Financial/economic return: long-term income and autonomy," the methods have different approaches and focus on different points. OASIS is particularly interested in the diversification of activities and outlets, participation in the local economy, and consideration of on-farm processing. However, the consideration of economic indicators is relatively uncorrelated with accounting indicators, which means that the economic viability of farms is only partially taken into account. Similarly, TAPE relies little on gross accounting indicators, which leads to the same problem. On the other hand, the comparative data provided by the FAO allows for a high degree of adaptability of the assessment to the local context. The IDEA 4 and CIVAM methods take a much more accounting-focused approach.

farms, which allows for more accurate consideration of criteria such as transferability, preservation of added value, and wealth created by assets. However, this approach makes data collection more difficult, particularly if several legal structures coexist, requiring the consolidation of accounting data. The CIVAM method is less comprehensive than IDEA, particularly with regard to the diversification of activities, the consideration of processing, and integration into the local market. Open Compass takes economic indicators into account in a much less comprehensive and accurate manner than the other evaluation methods.

Next, for the category "Social return: caring for people on the farm, life in the region, employment, education, social ties," the OASIS and TAPE methods have definitions that are quite similar to those of EUfarms in terms of socio-territorial themes. The criteria that are important to the association are well taken into account in both methods. IDEA 4 also gives these issues a central place in its assessment, but with an emphasis on territorial anchoring and a few themes not addressed, such as the integration of women and product accessibility. The CIVAM method mainly uses economic indicators to address socio-territorial themes, which does not allow all the criteria important to the association to be taken into account.

Regarding the category "Return of inspiration: return of hope and purpose," TAPE mentions these elements but in an aggregated and therefore non-explicit manner. IDEA 4 and OASIS deal with these themes comprehensively, particularly on the issue of knowledge transfer and training. The CIVAM and Open Compass methods address them only partially (apart from training, which is covered in Open Compass).

Finally, EUfarms expressed the need for the concept of "robustness" to be taken into account. This is defined as the ability of a farm to operate its system autonomously, independently, and in the face of the various crises it encounters. OASIS is certainly the method that would take this into account the most through its "Resilience" dimension, which is composed of numerous criteria referring to it. TAPE also mentions it, but in a less central way. IDEA 4 and the CIVAM diagnosis, *on the other hand*, have an approach that is very focused on triple performance and sustainability. It would be necessary to study the approach based on the properties of IDEA 4 to understand how this theme is taken into account, but due to time constraints, it was impossible to do so. It is more difficult to answer this question regarding Open Compass, given that the economic theme is rarely addressed.

Conclusion on the content

Given these factors, two distinct groups of methods can be identified. On the one hand, OASIS and TAPE focus on a practice-based approach that reflects the level of progress made by farms in the agroecological transition. However, OASIS is more suited to the needs of EUfarms than TAPE, as it was created in a European context and takes into account more criteria that are important to the association. On the other hand, IDEA 4, OpenCompass, and the CIVAM sustainability assessment are more focused on measuring the triple performance (environmental, economic, and social) of the farms evaluated, based on more quantitative and precise criteria compared to pre-established benchmarks. IDEA 4 stands out among the three methods by taking a much broader and more detailed approach to all topics. Therefore, when considering the content of the methods, it would be advisable to select either OASIS or IDEA 4, depending on the preferred approach.

5.2.2 Field application

Beyond an opinion and a comparison of the content of the methods, it seems important in the context of this study to compare their application in the field. Indeed, the chosen method will potentially have to

be applied in the long term by different people, who are not French, and with as little involvement as possible from farmers.

Data collection

With regard to data collection, IDEA 4 requires a large amount of information. In addition to the interview with the farmer, it seems necessary to use additional documents (in particular clear and reliable accounting records). In a European context, it is possible that the farmer may not have sufficiently clear documents or may not have all the documents requested. Consolidation is also necessary for accounting in a multi-structural framework (common for EUfarms). These characteristics of IDEA 4 are also present in the CIVAM and Open Compass methods. There is an additional difficulty with the CIVAM method: the lack of precision for searches in accounting documents (where IDEA 4 specifies the accounting code for each entry).

Regarding the tools provided, TAPE does not have any pre-designed tools. You must organize the data collection yourself. For CIVAM, the interview must be constructed by the evaluator based on the user guide.

Given this observation, it is interesting to note that TAPE and OASIS require data collection that is easier to manage. They focus in particular on the operator's feelings and practices, which leads to more intuitive communication. These methods are designed to be carried out directly by the operator. Fewer documents need to be provided and results are obtained more quickly than with the other three methods. This is mainly because consolidation of entities is not necessary.

Data processing

Contrary to the previous paragraph, data processing is more difficult for TAPE and OASIS than for the other three methods. OASIS requires regional averages for around ten indicators (which are not necessarily easy to find everywhere in Europe). Furthermore, TAPE did not have tools that provided results directly.

In contrast, IDEA 4, Open Compass, and CIVAM have a clear tool for processing results.

Conclusion of the field application

In light of the two previous sections, it appears that two groups stand out. IDEA, Open Compass, and the CIVAM method opt for complicated data collection but simple, integrated processing (calculations, decision grids, and referencing are integrated into the data entry tool). In contrast, OASIS and TAPE opt for simple data collection, as this can be carried out by the farmers themselves, but complicated processing, as farms on a global or European scale are taken into account.

5.3 Discussion and recommendations

It should be noted that the final evaluation of methods and associated opinions after selection (part 5) are based solely on the implementation of methods on a single farm. Discussions related to methods are therefore largely informed by sensitive indicators encountered in the context of a single farm. This fact constitutes a bias in the representativeness of situations.

The use of a single interview guide (which combines four methods) for conducting field assessments also introduces bias in the perception of data collection ease. The analysis of IDEA 4 and its ease of implementation in the field may have suffered from the fact that the

questionnaire provided by the designers was not used in favor of a questionnaire created by the investigators (based on the OASIS method questionnaire).

In addition, strong assumptions were made in order to carry out the methods (particularly in terms of accounting for IDEA and CIVAM). These intra-method biases necessarily lead to a bias in the final opinion on the method.

Agronomic knowledge and values also skew the results. For example, we believe that soil cultivation must be taken into account, and the CIVAM method is heavily penalized as a result.

Finally, the time constraints involved in delivering the project meant that the results could not be put into perspective. The farmer surveyed during the fieldwork was unable to provide feedback and highlight any issues he might have found problematic. In addition, phase 3 of TAPE (putting the results into perspective with the stakeholders concerned) could not be carried out. Finally, the IDEA reference platform was not used, so it was not possible to access the full analysis of the available properties once the evaluation was posted online. The perspective on the results discussed in this paragraph might have influenced the final opinion given on each method.

6 Conclusion

The approach implemented during this project made it possible to compare a large number of assessment methods in order to select a few for the EUfarms network. Ongoing discussions with the sponsors throughout the project made it possible to define the specific needs and objectives of EUfarms. These elements were used as selection criteria to choose five methods applicable to a test farm in the network and to compare these five methods and the results they produced. What can be gleaned from this comparison is that the organization of the methods (number of indicators, nature, aggregation and weighting methods, hierarchy) has a significant influence on how the information is taken into account and how the assessment is rendered. This comparison of assessment approaches identified two distinct groups of methods. On the one hand, OASIS and TAPE have approaches focused on the progress of farms in their agroecological transition, which translates into a practice-oriented approach to indicators. On the other hand, IDEA 4, the CIVAM sustainability assessment, and OpenCompass have approaches that focus on assessing sustainability or triple performance, taking into account more quantitative indicators that measure effects rather than practices. Within each of these groups, OASIS and IDEA 4 stand out for the breadth of information they take into account and their good alignment with EUfarms requirements. It is difficult to recommend one method over the other, as they are based on very different but equally relevant approaches.

All of this work can serve as a basis for discussion and further work by the future EUfarms scientific committee, which will decide on the multi-criteria assessment method to be used to evaluate 20 farms in the network.

7 Works cited

Agroecology Europe. 2022. *Agroecology Europe*. <https://www.agroecology-europe.org/>.

Open Compass Development Group. n.d. *Open Compass*. <https://www.opencompass.org/>.

Darmaun, Maryline. 2023. *Evaluation of agroecosystems undergoing agroecological transition. Design and implementation of a prototype method in four use cases in France and Senegal*. University of Montpellier: Institut Agro Montpellier.

INRAE. 2022. *IDEA 4 method*. <https://www.edued.fr/LS/IDEA4>.

—. 2022. *All IDEA tools*. <https://methode-idea.org/outils>.

Lairez, Juliette, Pauline Feschet, and Joël Aubin. 2016. "Agriculture and sustainable development: Guide to multi-criteria assessment." (Educagri éditions).

Soulé, Emma, Philippe Michonneau, Nadia Michel, and Christian Bockstaller. 2021. "Environmental sustainability assessment in agricultural systems: A conceptual and methodological review." (Journal of Cleaner Production) 325 (129291).

Appendices

Appendix 1. All methods from the two selected pools selected

Methods from the work of Soulé <i>et al.</i>	Methods from documents sent by EUfarms
IDEA Diagnosis of Small-Scale Farming DiagAgroEco CIVAM sustainability diagnosis	CARE / IDEA4 EcoFarms Dialect Open Compass Quantification of Organic Farming Externalities TAPE ACCT Certificates Small-scale farming diagnosis CIVAM CAP'2ER sustainability diagnosis OASIS PerfAlim Forest, Land and Agriculture science-based target-setting guidance (SBTiFLAG)

Appendix 2. Results of stage 0 of TAPE

Exploitation	Country	France
	location	Sorans-lès-Breuray
	coordinates	0621531305 Michel Devillairs
	type	mixed farming
	system name	They Organic Farm
community	household (men, women, young people)	Men: Jean-Baptiste, Mathis (under 25), Michel /// Women: Isaline (under 25), Emma, Amandine (under 25), 1 packer, Evelyne
	labor labor (men, women, young people)	Men: Jean-Baptiste, Damien, Flavien (FTE), Alain (FTE), Mathis (apprentice, under 25), Manoé (intern, under 25), 2 college interns (under 25), Maxime (butcher), Antonin (apprentice, under 25), 1 packer, Michel /// Women: Isaline (under 25), Emma, Amandine (under 25), 1 packer, Evelyne
productive activity	area	200 ha
	different productions (workshops, crop rotation, trees, etc.)	11.47 ha of soft wheat, 1 ha of diversified market gardening (tomatoes, onions, leeks, lettuce, beans, raspberries, strawberries, etc.), 0.59 ha of potatoes, 39.35 ha of alfalfa alone, 117.23 ha of legume/grass mixtures, 30 ha of permanent pasture, 138 dairy cows, 152 pigs, 100 laying hens, and around 60 common rabbits
	Destination of production (share for own consumption)	Personal consumption (negligible portion), sale at the farm shop (SARL) for ALL (flour to a baker for bread), milk and cull cows in long distribution channels
favorable environment	natural context and environmental challenges	Good organic matter content in the soil, agroecological infrastructure on the farm (groves, ponds, riparian forests, hedges, grass strips), peatlands/wetlands, deep soil (prone to drought)
	public policy and and market context	Pioneer in local conversion to organic farming, but the number of organic farmers has increased from 1% to 10%, with 12 ha of MAEC contracted with the Department (Haute-Saône), highly controlled/monitored in its decisions
	and and networks involved in agroecology	EUfarms, AMF, GRAB (Franche-Comté), Haute-Saône Chamber of Agriculture (for landscape integration), participation in numerous training courses and also for employees

Appendix 3. OASIS graphical results



Appendix 4. Complete exclusion grids

Methods	Study scale = operation	Multi-criteria: consideration of aspects (economic + social + environmental)	degree of application = generic (case study influencing the creation of a method)	Plant and animal production	objective different from certification only	architecture with indicators	Opacity
Care / Idea4 (Anna)	Yes	yes	Yes	All	Yes	yes	Conversion into capital Not obvious
Idea4 (Anna + P)	yes	yes	yes	All	yes	yes	explicit
Dialect (PS)		no					
EcoFarms (PS)							little documentation and no direct access to the tool
Regenerative Alliance Label (R)	no						
Biodiv score (R)			no				
Certified quality labels (R)					No		
Planet score (R)	No						
Regenerative agriculture (R)					No		
Open Compass (PS)	yes	yes	yes	all	Yes	yes	explicit
Evaluation of positive externalities (PC)	no					No	
TAPE (PC + A)	Yes	yes	yes	all	yes	Yes (60 indicators aggregated into criteria)	explicit
ACCT		no					
Sustainability diagnosis (CIVAM) A	yes	yes	yes	all	yes	yes	explicit
Cap2er (PC)				Very focused on cattle/sheep/horse breeding + field crop methods			
OASIS (R)	yes	yes	yes	yes	yes	yes	explicit
Perfalim (PS)		no					
SBTi FLAG Guidance (R)			no				
Diagnostic for Smallholder Agriculture (R)	yes	yes	Generic	all	Yes	yes	explicit
DAESE			No (settings configured for the Picardy region and can be adapted for other French regions)				

Diagagroeco	Yes	Yes	yes	yes	yes	Yes	Little documentation but direct access to the tool
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Appendix 5. Complete comparison table (orange = selected method)

Tableau de comparaison des analyses multi-critères			Explications	CARE/IDEA4	IDEA 4	Open Compass	TAPE	Diagnostic Agriculture Paysanne	Oasis	Diagnostic de durabilité CIVAM	Diagagroeco
Informations générales étude	Type de production agricole	Polyculture-élevage, grandes cultures, cultures pérennes, élevage, quelles sont les exploitations qui peuvent-être évaluées ?	Tout type	Tout type	Tout type	Tout type	Tout type	Tout type	Tout type	Tout type	Tout type
	Prise en compte de la transformation		non	non	non	oui	oui	exploitation + insertion territoire	oui	oui	non
	Echelle spatiale	échelle de la parcelle, de l'exploitation, du territoire	exploitation	exploitation	exploitation	exploitation	exploitation	exploitation	exploitation	exploitation	exploitation
	Echelle temporelle d'étude	A un instant t ? Evolution dans le temps ?	instant t (identifie marge de progrès)	instant t (identifie marge de progrès)	instant t		instant t	instant t + évaluation régulière pour suivre l'évolution	instant t	instant t	instant t
	Type de structure	Quelle taille d'exploitations sont évaluées ? Ferme-familie? Coopérative?	Tout type	Tout type	Tout type	Tout type (même si particulièrement adapté à l'agriculture vivrière)	exploitation familiale / paysanne	Tout type	Tout type	Tout type	Tout type
Objectifs / Finalités	Certification, Sensibilisation, Apport de connaissances, Diagnostic, Comparaison des systèmes, Identification des éléments à améliorer / Conseil, Conception des systèmes		Apport de connaissances, Diagnostic, Identification des éléments à améliorer & Conseil, prédition des coûts financiers	Apport de connaissances, Diagnostic, Identification des éléments à améliorer & Conseil, Conception des systèmes	Apport de connaissances, Diagnostic, Identification des éléments à améliorer & Conseil, Conception des systèmes	Sensibilisation, Apport de connaissances, Comparaison des systèmes, Conseil	Diagnostic Agriculture Paysanne, Conseil	Diagnostic, Comparaison des systèmes	Diagnostic pour évaluer la durabilité	Sensibiliser et accompagner vers la transition agroécologique, évaluer la performance et engagement dans agroécologie, faciliter les discussions avec conseiller et groupe, pistes de progrès	
	Temps nécessaire	Temps nécessaire pour réaliser l'étude (pour l'exploitant)	Temps IDEA 4 = CARE (entretien auprès agris, diagnostic et traduction des coûts)	collecte des données 3 mois, 3 mois d'apprentissage la méthode et d'analyser les documents apportés par l'exploitant	demi journée	enquête en ligne de 4 heures maximum (analyse + retours + résultats + réflexion collective)	demi journée	1/2 j ou 1j	1 journée par ferme	?	
	Nationalité de la méthode et application dans quelle zone ?		Française	Française	Belge	FAO (international)	Français pour fermes plutôt françaises	Européenne et Europe	française et France principalement	France	
	Qui a créé l'outil ?	Scientifiques ? Public ? Privé ?	INRAE, Public (CEV, IDELE, ENSFEA, CEZ-Bergerie Nationale)	INRAE, Public (CEV, IDELE, ENSFEA, CEZ-Bergerie Nationale)	Farm for Good, société coopérative	FAO	FADEAR	Agroecology Europe Scientifiques + Public	CIVAM	ACTA à partir connaissances Instituts techniques et INRAE	
	Age et nombre de versions	De quand date la méthode ? Quelle version ?	11 ans	25 ans (2000), 4ème version	moins de 4 ans	6 ans (2019)	? (certainement 1ère version)	2021 : 1ère version	années 2000, plusieurs versions (révisé régulièrement)	9 ans, améliorations continues	
	Qui évalue ?	Qui peut réaliser l'évaluation ? Faut-il une accréditation ? Y a-t-il besoin d'un acteur tiers ? Faut-il une formation ?	un acteur tiers (initié à la comptabilité)	acteur tiers recommandé / initié (pas de formation) : étudiant, stagiaire, apprenti, enseignant, conseiller agricole, chargé de mission, chercheur	acteur de Farm for good (pour avoir accès aux documents)	l'agriculteur lui-même (faisable par conseiller ou collectivité)	Agriculteur avec accompagnement de l'ADEAR	Tout le monde, détaillé de l'évaluation disponible, formation par AEEU	Tout le monde mais tout de même analyse compté et entretien (formation)	Agriculteurs et conseillers	
	Destinataire	A qui s'adresse les résultats ? pour qui sont-ils compréhensibles ?	Agriculteurs, financeurs, pouvoirs publics, acteurs de territoire	Agriculteurs, conseillers, chercheurs, décideurs publics	Agriculteurs, conseillers, chercheurs, acteurs territoires	Agriculteur, FAO (alimenter bande de données)	Agriculteur	Agriculteurs, pouvoirs publics, consommateurs	Agriculteurs, conseillers, enseignants, animateurs de groupe, consommateurs	Agriculteurs, conseillers	
	Moyens financiers nécessaires	L'évaluation a-t-elle un coût financier pour l'exploitant ? (Si info disponible)	Non	Coût du conseil selon organisation réalisant la méthode	Non	Non	Non	Non	Non	Non	
	Moyens humains à déployer	L'exploitation doit-elle déployer des moyens humains pour réaliser l'évaluation ? (Estimation)	conseiller et potentiellement une personne capable de traduire monétairement	Enquête pour l'entretien ou Agriculteur lui-même, personne initiée à la comptabilité (surtout si compte pas consolidée)	Enquêteur pour l'entretien	Non (questionnaire à remplir par l'agriculteur, en théorie, mais réalisable sous forme d'enquête)	Enquêteur pour l'entretien	Enquêteur pour l'entretien	Enquêteur pour l'entretien ou Agriculteur lui-même personne initiée à la comptabilité (surtout si compte pas consolidée)	Agriculteur rempli lui-même	
CONTEXTE DE L'ÉTUDE	Type de collecte de données	Entretiens, dossier PAC, analyses ...	Compte de résultat + info pour IDEA +	plan cadastral, relevé PAC, facture énergétique, relevé compteur d'eau, liste des matériaux automotrices, info des surfaces par cultures, cahier d'enregistrement physionantais, cahier de fertilisation, liste animaux par espèce, cahier élevage, liste des quantités/composition des aliments, document de synthèse du cabinet comptable, détail des aides versées	Entretiens, PAC	Entretien avec l'exploitant	Documents comptables, documents PAC, entretien	Entretien avec l'exploitant	Entretien avec l'exploitant, étude de la comptabilité	Entretien avec l'exploitant, données économiques	
	Accès à la donnée (visibilité, accès aux résultats et à la méthode)	Méthode open source ? Opacité de la démarche ? A-t-on accès à la méthodologie ?	Open source	Open source complet, méthode accessible sur internet	Pas d'accès direct à la méthode sur internet, mais possible d'accéder avec les créateurs, informations pas complètes sur le site	Visibilité totale pour les indicateurs, mais pas d'accès direct avec les créateurs, informations pas complètes sur les papiers de la méthode	Manuel détaillé pour 30 €	Méthodologie détaillée en libre accès	Méthodologie détaillée et tous les documents en libre accès	inscription pour utiliser le diagnostic, mais pas d'accès direct, mais où trouver info sur construction et réflexion outil ?	
	Qualité des sources	Sur quelles références se construit la méthode ? Références bibliographiques scientifiques ? Conseil scientifique ?	Références bibliographiques scientifiques	Références bibliographiques scientifiques	Théoriquement très clair mais sources manquantes / non actualisées.	Références bibliographiques scientifiques	FADEAR, peu de références scientifiques précises et bibliographiques	Inspiration à partir de nombreuses méthodes d'évaluation multicritères de l'agriculture internationale + réf scientifique + conseil scientifique	pas de références bibliographiques dans le document	pas accès au document pouvant présenter des références	
	Données de référence	Existe-t-il une base de données de référence sur laquelle se fonde la méthode ?	Pas de données de référence pour comparer la ferme à d'autres	Il n'y a pas "une base de données" mais pour chaque indicateur, présence de références bibliographiques associées aux auteurs utilisés pour calculer l'indicateur	Pas de comparaison à des données de référence	Peu de données de référence	?	Comparaison à des moyennes régionales pour certains indicateurs	Oui moyennes régionales des IFT, moyennes nationales pour consommation moyenne des travaux cultureux et CTEX	Pas de comparaison à des données de référence	
	Architecture des données (indicateurs, dimensions, critères...)	Comment s'organisent les données pour arriver au résultat final ?	Indicateurs IDEA + CARE : 53 indicateurs répartis en capitaux (biodiversité, atmosphère eau, troupeau, humain, sociétal, patrimonial	2 grilles d'évaluation : 1ère grille : 3 dimensions, 13 composantes (4 à 5 composantes par dimension), 53 indicateurs (2 à 8 indicateurs par composante) ; 2ème grille : 5 propriétés, 15 branches	36 indicateurs répartis en 10 éléments de l'agriculture + l'étape 2 : (10 critères, 4 à 5 items par critère)	16 indicateurs répartis en 4 catégories	6 thèmes de l'agriculture paysanne (travail avec la nature, autonomie, transmissibilité, développement local, répartition, qualité) → thèmes → critères → indicateurs	5 dimensions (Pratiques agricoles, viabilité économique, aspects sociétaux, environnement et la biodiversité, résilience) → thèmes → critères → 1 ou 2 indicateurs par critère	3 dimensions (économie, social, environnemental), 24 indicateurs calculés à partir de données rentrées	3 dimensions : pratiques, performances, démarches	
	Modalité d'agrégation	Nombre de niveaux dans l'architecture de données	somme d'argent	3	Aucune	2	3	4	note finale par critère (determinée dans le guide)	?	

		Niveau final d'agrégation	Durabilité -> Dimension du DD -> critères -> indicateurs (cf note définition)	somme d'argent	Note de la dimension la moins performante parmi les 3	Aucune	Aggrégation des indicateurs en éléments clés (résultats par élément)	Aggrégation des indicateurs en critères puis en thèmes avec une note	Aggrégation finale, moyenne des notes de 5 dimensions	Aggrégation de sous-indicateurs	?	
		Type d'indicateurs	Où se situent les indicateurs sur la chaîne cause/impacts ?	cause	cause	majoritairement cause	majoritairement cause	Cause	Cause ou pratiques	causes (pratiques)	?	
		Pondération	Facteurs de pondération et à quelle échelle ?	?	valeur d'un indicateur dans 20 selon les indicateurs (avec forte pondération + pondération des indicateurs au sein d'une même composante, même si celle-ci n'a pas de PLS de pondération entre composante ou entre dimension)	aucune	Aucune	Pondération au niveau des indicateurs et critères en fonction des questions, pas de pondération entre les thèmes	Pondération de 1 à tous les niveaux d'agrégation	Aucune	?	
		Compensation	Compensation possible ? A quel niveau ? Explication	?	Pas de compensation entre dimensions mais compensation entre indicateurs et composantes	aucune	compensation entre indicateurs pour le même élément mais pas entre les éléments qui ne sont pas agrégés	Pas de compensation possible entre les thèmes, compensation entre critères	Compensation possible car moyenne à tous les niveaux	pas de compensation	?	
		Livrable	Format	Quel format de livrable ?	dossier complet par capital + une page sur IDEA4	Cartes heuristiques par propriété + résultats par dimension avec les scores des propriétés	graphique en radar et conseil basé sur jauge correspondantes au radar par indicateur	Radar des résultats pour les éléments pour la caractérisation de la transition agroécologique + rapport et organisation d'événements pour débats dans les étapes suivantes	Fleur ou diag en radar	Note unique + graphes radars par dimensions	Document qui donne une note par critère (pas de note finale totale)	?
		Conséquences après complément des résultats / Interprétation des résultats	Conseil sur les pratiques ensuite ? Comparaison avec des cours de référence ? Prise de décision	Conseil, prise de décision	Prise de décision, mise en place de discussions	Conseils, rédaction automatique d'un rapport	réalisation d'un rapport d'agroécologie puis organisation de débats collectifs et mise en commun à l'échelle des collectivités	Conseil sur les points positifs et négatifs	Discussion, évaluation forces et faiblesses, possibilité d'avancement marketing	Evaluation des faiblesses et points forts de la ferme (pas de comparaison avec d'autres)	Réflexions sur les performances, pratiques et démarches, estimer degré d'engagement dans l'agroécologie	
		Approche générale	Dimension du DD mise en avant // Quelle définition et échelle de la durabilité ?	CARE concentré que sur économique	équité dans le traitement de l'environnement, du social et de l'économie	Concentré sur économique et environnemental	social avec, mis en avant devant la viabilité économique (qui est aussi présente quand même)	Les trois mais surtout social et autonomie éco	Équité dans les dimensions du DD	plus de critères : environnement > société > économie	?	
		Performance économique	Indicateurs économiques	Nombre d'indicateurs - proportion cause / impact des indicateurs : liste des indicateurs	tout est transformé en valeur monétaire - TOUS	7	1	3	?	14	13	?
			Prise en compte de la transformation	//	0	1/2	0	1/2	?	2	1	?
			Prise en compte de la synergie entre productions agricoles	//	0	4	2	2	?	0	2	?
		Social	Bien-être au travail	//	8	8	1	6	?	13	4	?
			Insertion territoire	//	0	14	0	10	?	6	8	?
		Environnement	Eau	//	7	3	1	1	?	1	1 (pas pris en compte pour le diagnostic)	?
			Atmosphère	//	5	3	0	1	?	0	1	?
			Sol	//	12	3	4	4	?	8	1	?
			Ressources	//	0	4	3	2	?	1	1	?
			Biodiversité	//	11	6	5	6	?	11	14	?
		Bien-être animal		//	9	1	0	1	Pas l'info	2		

Appendix 6. Complete EUfarms criteria grid

Critères importants pour EUfarms			TAPE		IDEA 4		Civam		OASIS		OpenCompass	
Régénération de l'écosystème : biodiversité, sols, paysages résilients	Actions (et non agir) pour accueillir la biodiversité	Réensauvagement infra-parcelaire ou laisser des espaces à la vie Sauvage / Présence de bois sur la ferme	Oui 1	critère étape 2 "gestion des nuisibles" + tout le thème étape 2 "biodiversité (critères "couverture végétation", "apiculture", "auxiliaires")	Oui 2	Zones non productives, usage insecticides, accueil pollinisateur sauvage, STH, Arbres et haies	Oui 1	biodiversité sauvage et élevée/cultivée, place de l'arbre	Oui 2	Maximisation des réseaux écologiques, Agriculture à haute valeur naturelle (HVN)	Oui 2	Biodiversité et eaux : maillage écologique + progression vers l'AS Y parcelles (nb par ha)
	Régénération des sols	évolution matière organique et microbologie du sol	Oui 2	"contexte naturel" étape 0 + item "Gestion des sols" + critère du sol" étape 1 + thème étape 2 "santé du sol" (critères "structure", "compactage", "profondeur", "résidus", "couleur", "rétenzione", "couverture", "érosion", "inverséries", "microbiologique")	Oui 2	Favoriser MO sol, qualité biologique des sols (couv permanente, non travail sol, SAU sans pesticide, désinfection vapeur, lutte contre érosion)	Oui 1	érosion ; rotation	Oui 2	Gestion agroécologique de la fertilité des sols : Maximisation de la couverture du sol ; Optimisation du bilan de carbone du sol ; Minimisation de l'érosion des sols ; Minimisation de la salinisation des sols	Oui 2	sol vivant - bilan humique, couverture des sols, intensité du travail du sol, diversité des espèces
	Reconnecter l'eau à la terre - Hydrologie Régénérative / création de mares... d'où vient l'eau utilisée sur la ferme?	nb mares, entretien nasseaux	Oui 1	item "préservation/conservation de l'eau" étape 1	Oui 2	Sobriété prélevements et partage ressource; Source prélevement aussi, pression prélevement et vulnérabilité de la ressource. Attention, seul trois indicateurs et sembleront très durs. Ex. Même si c'est 0 parce qu'il prélevé 22 litres en souterrain. Dès que souterrain, classé "très forte sensibilité", cf photo ci-contre. Economie: De plus, prise en compte de la réduction des besoins (autres types de systèmes (hivergar etc...) dispositifs économies Aménagements: mares etc mais plus pour la biodiv que pour l'eau Précision: Plusieurs items dont même si le 1 est peut être rapide dans la conclusion, c'est ratrappable.	Non 0	Gestion de l'eau -> pas pris en compte ; Biodiversité : présence de mares (mais autant que friches et tout)	Oui 2	Gestion d'un microclimat favorable ; Gestion efficace de l'eau ; Maximisation des réseaux écologiques	Oui 1	Maillage écologique - mares, irrigation (type, volume d'eau, origine de l'eau)
						Items donc même si le 1 est peut être rapide dans la conclusion, c'est ratrappable.						
	Linéaire de haies + diversité des arbres OU diversité des espèces ↳ agroforesterie	km haies pour 100 ha	Oui 2	item "Arbres" et "Intégration des arbres" étape 1	Oui 2	Tout le continuum de arbre soit à haies, arbres isolés jusqu'à agroforesterie est pris en compte. Néanmoins, agrégé dans un critère "Surface biodiv développée en % de SAU".	Oui 2	Place de l'arbre	Oui 2	Niveau élevé d'adoption de l'agroforesterie	Oui 2	Maillage écologique - arbres isolés, arbustes, haies, bosquets
	Plein air des animaux / Les animaux vivent dans ce qui se rapproche de leur écosystème naturel et peuvent réaliser leurs fonctions vitales (une vache peut être une vache)	Cheptel, pâturage (dynamique), % temps de pâturage à l'herbe, nombre de bœufs par ha	Oui 2	item "Animaux", "Protection des cultures et des animaux", "Bien être animal"	Oui 2	Oui, pâturage permanent pris en compte, accès eau propre etc. ; pâturage pris en compte. Pour la partie en pâturage EEA en particulier, l'ensemble des critères forment un note globale donc non pâturage permanent ratrappable par abbatage à la ferme	Non 0		Oui 2	Niveau élevé de bien-être animal ; Gestion agroécologique du bétail	Non 0	
	Abattage à la ferme ? En dehors de la ferme, à combien de km ?		Non 0		Oui 2	Abbatage à la ferme des lapins / volailles, comme avant quelques critères mais ratrappable	Non 0	Empreinte foncière	Oui 2	"utilisation des méthodes d'abattage et de transport les plus humaines possibles" dans Niveau élevé de bien-être animal	Non 0	
	Conservation de la valeur ajoutée / création de valeur	Pourcentage de la production transformée à la ferme / Pourcentage des ventes en circuit court / outre à la ferme ? % des ventes dans cette boutique ?	Non 0		Oui 1	Vente à la ferme / proche du producteur, valorisation de proximité géographique dans plusieurs item dont un item dédié "Valorisation par circuits courts ou de proximité". Pas de transfo abordée	Oui 1	Ancrage territorial	Oui 2	Proportion élevée de pratiques de valorisation des produits d'amélioration de la qualité ; Forte proportion de produits locaux ou auto-transformés ; Circuits de commercialisation courts	Non 0	
		EBE / personne ou EBE / ferme ou par 100 ha	Non 0		Oui 2	EBE / UTA NS calculé pour transmissibilité économique	Oui 1		Non 0	/	Non 0	
Retour des finances / de l'économie : des revenus résilients sur le long terme pour les communautés ... + autonomie	Vente locale	Répartition géographique de l'export des productions de la ferme	Oui 2	"contexte de marché" étape 0 + critère "Economie de proximité et solidaire" (items "Commercialisation locale" et "Systèmes alimentaire local") étape 1	Oui 2	Vente à la ferme / proche du producteur, valorisation de proximité géographique dans plusieurs item dont un item dédié "Valorisation par circuits courts ou de proximité"	Non 0	Empreinte foncière	Oui 2	Circuit de commercialisation local ; Circuit de commercialisation alimentaire courts et locaux	Non 0	
	Diversité des activités	Nombre de structures juridiques actives sur la ferme	Non 0	thème "Autres activités" étape 2	Non 0	Pas sous forme de structures juridiques	Non 0		Non 0		Non 0	
		Nombre d'ateliers de transformation / capacité de production	Oui 1	thème "Autres activités" étape 2	Oui 2	Oui via critère "diversification productive" qui prend en compte la diversification (en nombre de produits qui représentent plus de 15% du CA) et la non sur-importance de l'atelier principal. Diversification des clients.	Non 0		Oui 2	Niveau élevé de diversification des produits ; Niveau élevé de diversification des clients ; Niveau élevé de diversification des activités	Non 0	
	Capacité à transmettre	Taux d'endettement et son évolution	Oui 2	Item "endettement/emboursement prêt" étape 1 + critère "intérêt sur la dette" étape 2	Oui 2	Capacité de remboursement, taux endettement structurel dans la composition d'endettement et en plus une composition décide avec transmissibilité éco + pérennité globale	Oui 2	Anticiper sa transmission, Transmissibilité économique	Oui 1	Jeune agriculteur ou présence / fortes chances de successeur	Non 0	
	Organisation du travail / Gouvernance équilibrée / Prise de décision claire		Oui 2	Item "émancipation des femmes" étape 1 + thème "émancipation des femmes" étape 2 (avec notamment "temps consacré", "% personnes travail et de 10 à 15 h", "décision pour végétale", "décision sur prod animale", "décision sur autres activités", "propriété animaux", "propriété végétaux", "propriété autres activités", "propriété principaux	Non 0	Sauf si on parle d'associations / de réseau annexes mais pas dans l'exploitation	Non 0		Non 0		Non 0	

Répartition salarié, apprentis, associés, à leur compte, etc.	curiosité	Oui 2	"communauté" étape 0 + item "émancipation des jeunes et émigration" étape 1 + thème "jeunesse et éducation" étape 2 ("jeunes sur l'exploitation", "jeunes travail sur l'exploitation", "jeunes en formation", "reprise exploitation" "niveau de formation")	Oui 2	Nombre d'UTA et répartition, indicateur: "Contribution à l'emploi et gestion du salarial" avec plusieurs items notamment SAU/UTA, Formation continue, accueil stagiaire etc (indicateur = formation)	Non 0		Oui 1	Capacité d'attirer et de conserver une main-d'œuvre motivée --> combien de temps restent les employés dans l'exploit	Oui 1	UTH sur la ferme, Nb de salariés
Relative "indépendance" : aides PAC et autres aides, irrigation, pétrole, intrants...	L'objectif n'est pas forcément la totale indépendance des aides. Exemple de fermes qui utilisent les aides PAC pour faire de leurs fermes des réserves naturelles (Paysans de Nature)	Non 0		Oui 2	Indicateur: Sensibilité aux aides à la production ("sous le seuil ou au-delà", EBE), contribution revenus extérieurs et diversification. Autre composante: Efficience globale (notamment sobriété en intrant)	Oui 2	Autonomie par rapport aux aides	Oui 2	Faible part des subventions dans le revenu agricole brut,	Oui 1	Primes
	Indépendance irrigation, pétrole, intrants	Oui 2	critère "Recyclage" + critère "Efficience" étape 1	Oui 2	cf ci avant	Oui 2	Indépendance énergétique et tout, renouvelable certains indicateurs de biodiversité par exemple (à préciser)	Oui 2	Minimisation des coûts variables	Oui 2	Autonomie et résilience : autonomie en N, autonomie alimentaire élevage, Indépendance énergétique
Qui investit dans la ferme (foncier et outil de production/transfo/accueil) et part de PAC et institutions	curiosité - pour savoir : est-ce que dans les fermes c'est une foncière qui investit dans le foncier ? + part de PAC : pour différencier le foncier / tout de production	Non 0		Oui	part de PAC et avant, contribution de revenus extérieurs aussi (juste un oui / non)	Non		Non 0		Non 0	
Création d'emplois	<p>On constate svr 3 "plus d'emplois de les fermes bios 5 à 10 * fois plus dans les fermes en agroécologie bio avec transfo</p> <p>En France rapport des chambres : 40,6 ha / ETP</p> <p>https://drive.google.com/file/d/1gprDFKmPLpKb8u3y8xWgWuOrTf5XJ3QE/vie?usp=sharing</p> <p>CA / UTH ou UTA ou ETP / évolution du nombre d'actifs dans le temps</p> <p>Empli / superficie : ETP/ferme ETP/100ha</p>	Oui 2	"communauté" étape 0 + critère "valeur humaine et sociale" étape 1 ("émancipation des femmes", "travail", "émancipation des jeunes et émigrations", "bien être animal")	Oui 2	SAU / UTA, création dans l'exploitation et contribution dans réseau, et >50% main d'œuvre saisonnière habite sur le territoire	Oui 2	Rémunération dégagée par hectare -> peut être utilisée pour créer des emplois ; Efficacité du travail -> rémunération dispo / UTH ; Viabilité socio-économique -> résultat social / UTH ; Transmissibilité économique -> Capital d'exploitation / UTH associés	Oui 2	Importante contribution comparative à la création d'emplois	Oui 2	UTH sur la ferme Nb de salariés, Norme UTA
Nourrir le territoire	Nombre de productions / Nombre de famille nourries pas la ferme / superficie / % de production pour alimentation humaine	Oui 2	thème "agrobiodiversité" de l'étape 2 + "émancipation de la production" étape 0 critère "culture et tradition alimentaire" étape 1 ("régimes alimentaires", "densité conscience locale alimentaire", "tradition de préparation des aliments, variété/race locales")	Oui 2	Part de la SAU consacré à alimentation humaine dans indicateur "Production alimentaire de l'exploitation". Autre indicateur : "Contribution à l'équilibre alimentaire mondial"	Non 0		Non 0		Oui 2	Perfarm
Proposition d'activités	Nombre d'ateliers autres (transfo / artisanat / table d'hôte, restaurant, boutique...)	Oui 2	thème "Autres activités" étape 2	Oui 2	Agrotourisme, Ferme pédagogique, services marchands rendus au territoire	Non 0		Oui 2	Niveau élevé de diversification des activités	Non 0	
Retour social : soin de l'humain à la ferme vie sur le territoire, emploi, éducation, lien social	Les femmes dans la ferme : ergonomie / intégration	Oui 2	item "émancipation des femmes" étape 1 + thème "émancipation des femmes" étape 2 (différents items "temps consacré à", % personnes travaillant + de 10,5 h", "décision sur prod végétale", "décision sur prod animale", "décision sur autres activités", "propriété animaux", "propriété végétaux", "propriété autres activités", "propriété principaux actifs", "propriété actifs secondaires", "participation événements agroécologie") + item "reconnaissance légale du terrain" étape 2	Non 0		Non 0		Oui 2	Niveau élevé d'équité entre les sexes	Non 0	
	Participation de la ferme aux réseaux locaux et nationaux ; associatifs, coopératives...	Oui 2	"acteurs et réseau de l'agroécologie en interaction" étape 0 + critère "co-création et partage de connaissances" étape 1 ("horizontale", "acès aux connaissances", "participation aux réseaux et organisation") + item "participation aux projets d'agroécologie" étape 2	Oui 2	Indicateurs : réseaux d'innovation et mutualisation, et implication sociale territoriale et solidaire (dans autre composante)	Oui 2	Ouverture professionnelle et sociale -> Participation à la vie sociale du territoire (associations, collectivité...) (réponse oui/non)	Oui 2	Participation substantielle et continue dans des réseaux, des collectifs, des organisations	Oui 1	Temps consacré aux réunions professionnelles, activité politique
Repas /événement en commun sur la ferme ? sur le territoire ?	portes ouvertes, accueil à la ferme... volonté sociale ou économique ?	Oui 1	"acteurs et réseau de l'agroécologie en interaction" étape 0 + item "participation aux projets d'agroécologie" étape 2	Non 0	sauf si salle de pause chauffée / installation compétent	Oui 2	Ouverture pro et sociale -> accueil de public	Oui 2	Communication transparente et haut niveau de responsabilité	Oui 2	Nb de jours ouverts au grand public
Accessibilité des produits à tous : prix adaptés en fonction des revenus/ prix libre ? Repas solidaires...		Non 0		Non 0		Non 0		Oui 2	Participation substantielle et continue à l'économie sociale et solidaire	Non 0	
Temps de travail par semaine moyen par paysan.ne		Oui 2	thème "émancipation des femmes" étape 2 (différents items "temps consacré à", % personnes travaillant + de 10,5 h" + critère "valeur humaine et sociale" étape 1 ("émancipation des femmes", "travail", "émancipation des jeunes et émigrations")	Oui 1	Nombre de semaines durant lesquelles l'agi se sent surchargé	Non 0	Efficacité du travail -> heures annuelles travaillées (en % du SMIC horaire net)	Oui 2	Niveaux de charge de travail satisfaisants : Temps suffisant pour les relations familiales et sociales	Oui 2	Nb d'heures par semaine, UTH sur la ferme, Nb de salariés
Capacité à l'écoute, la communication non violente, la prise de décision holistique		Oui 1	item "émancipation des femmes" étape 1 + thème "émancipation des femmes" étape 2 (avec notamment "temps consacré à", % personnes travaillant + de 10,5 h", "décision sur prod végétale", "décision sur prod animale", "décision sur autres activités", "propriété animaux", "propriété végétaux", "propriété autres activités", "propriété principaux actifs", "propriété actifs secondaires", "participation événements agroécologie")	Non 0		Non 0		Non 0		Non 0	

Retour de l'inspiration : retour de l'espoir et raison d'être	Possibilité de se former, transmettre	Jours de formation continue ou de participation à des réseaux par personne par an	Oui 1	"acteurs et réseau de l'agroécologie en interaction" étape 0 + item "participation aux projets d'agroécologie" étape 2	Oui 2	Formation continue en nombre de jours par an	Oui 1	Ouverture professionnelle et sociale -> démarche de formation	Oui 2	Suffisamment de temps pour acquérir des connaissances et de nouvelles compétences	Oui 2	Temps consacré à la formation, temps consacré aux réunions professionnelles, nb de colloques-conférences/an
	Temps dédié à transmettre son expérience : formations, stages, wwoofing, visites de fermes...		Oui 2	item "émancipation des jeunes et éducation" étape 1 + thème "jeunesse et éducation" étape 2 ("jeunes sur l'exploitation", "jeunes travaillant sur l'exploitation", "jeunes en formation", "reprise exploitation", "niveau de formation")	Oui 2	Accueil stagiaire, apprenti, accueil groupe pro, implication dans des structures pro	Non 0		Oui 2	Plaidoyer substantiel et continu et éducation sur l'agroécologie	Non 0	
	Inspiration générée par la ferme	Nombre de personnes touchées chaque année?	Non 0		Oui 2	Accueil public, implication citoyenne, transparence sur pratiques	Oui 1	Accueil public	Oui 2	Communication transparente et haut niveau de responsabilité	Non 0	
	Investissement citoyen pour permettre l'achat de la ferme		Non 0		Non 0		Non 0		?		Non 0	
	Pluriactivité en dehors de la ferme ? sur la ferme ?	Génère de la robustesse?	Oui 2	critère "résilience" étape 1 ("stabilité des productions", "réduction de la vulnérabilité", "endettement", "diversité des activités") + thème "autres activités" de l'étape 2	Oui 2	Revenu extérieur à la ferme Oui/Non + diversification	Non 0		Oui 2	Niveau élevé de diversification des activités	Non 0	
	Nombre de oui / Nombre de points		22	38		24	44	13	20	24	46	13