



**AGENT-BASED
SUPPORT TOOL FOR
THE DEVELOPMENT
OF AGRICULTURE POLICIES**

D4.2 Continuous report on platform usability



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Executive Summary

This deliverable presents the methodology followed to assess the usability of the AGRICORE tool, especially the AGRICORE interface. This follows the usability principles: useful, usable, desirable, findable, accessible and credible. Based on them, the interface of the AGRICORE tool has been developed. This started with the user research to elaborate on the profiles of the users. Then, the usability design includes the development of mockups as prototypes of the platform screens. Additionally, the user experience with the navigation among screens is designed to offer an intuitive navigation within the tool.

The usability of these designs was evaluated through usability tests described in D4.7. They provided valuable feedback that served to enhance the original mockups, resulting in the different screens of the current AGRICORE tool. These screens are presented and described in this deliverable. Among the most significant improvements regarding usability, the introduction of a stepper on the "Simulation Configuration" page and the adoption of table format to show synthetic populations in the "Synthetic Population" screen are highlighted.

Abbreviations

Abbreviation	Full name
ABM	Agent-Based Model
ARDIT	Agricultural Research Data Index Tool
UX	User Experience
GUI	Graphical User Interface

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1 Introduction

This document aims to provide a comprehensive analysis of the usability of the platform developed within the project framework. This is the main output of Task 4.1, which is in charge of continuously monitoring the usability of the technical developments. With the submission of this deliverable, T4.1 is completed.

In this deliverable, the usability of the AGRICORE tool, specifically its interface, is evaluated from the version of the tool until the last version with the final integration of the AGRICORE modules. D4.2 is closely linked with several other deliverables within the project scope, including D4.3, which focuses on the validated design of the AGRICORE application; D4.7, where all platform tests are documented; and D4.1, which outlines the technical requirements and features of the AGRICORE interface.

In this deliverable, it is important to understand the concept of usability and what it refers to:

"Usability refers to the quality of a user's experience when interacting with products or systems, including websites, software, devices, or applications. Usability is about effectiveness, efficiency and the overall satisfaction of the user."

It is important to realize that usability is not a single, one-dimensional property of a product, system, or user interface. 'Usability' is a combination of factors, including: [1]

- ***Intuitive design:*** A nearly effortless understanding of the architecture and navigation of the site.
- ***Ease of learning:*** How fast a user who has never seen the user interface before can accomplish basic tasks.
- ***Efficiency of use:*** How fast an experienced user can accomplish tasks.
- ***Memorability:*** After visiting the site, if a user can remember enough to use it effectively in future visits.
- ***Error frequency and severity:*** How often users make errors while using the system, how serious the errors are, and how users recover from the errors.
- ***Subjective satisfaction:*** If the user likes using the system.

This deliverable is structured in a progressive way to understand usability in the AGRICORE tool, how it has been measured and the evaluation results. This, the usability principles are first explained in Section 2. Then, Section 3 outlines a comprehensive usability evaluation strategy for the AGRICORE platform, emphasizing its importance in user acceptance and effectiveness and detailing objectives and methods to systematically assess and improve the interface's usability and user experience. Section 4 describes how the AGRICORE platform has been designed to fulfil the desired usability level. Usability evaluation and performed tests are detailed in Sections 5 and 6, respectively. Finally, the conclusions are exposed.

2 Usability principles

Recognised usability principles and patterns are adopted to guide the design and evaluation of the platform. These principles and patterns are based on established research and best practices in the field of usability and user experience [2]. These principles are illustrated in [Figure 1](#).



Figure 1 Usability principles

The usability principles and their application in the project are described below.

- **Useful:** The content of the AGRICORE platform must be original and meet a specific need of the users. It shall ensure that the content and functionalities provided are valuable, relevant and effective for users, helping them to achieve their objectives.
- **Usable:** The AGRICORE platform shall be easy for users to use and understand. Design patterns shall be applied that simplify interaction, minimise cognitive load, and facilitate navigation and workflow. Particular attention shall be paid to the intuitive layout of elements, clear labels and consistency in design.
- **Desirable:** Design elements, such as images, brand identity and other visual elements, will be used to evoke emotions and appreciation in users. Work will be done to create an attractive and pleasing aesthetic that enhances the user experience and strengthens the identity of the AGRICORE platform.
- **Findable:** The content of the AGRICORE platform must be easily found and navigable both on and off the site. Design patterns that facilitate the search and discovery of relevant content will be followed, such as a clear navigation structure and relevant internal links.
- **Accessible:** Ensure that the AGRICORE platform is accessible to all people. Recognised web accessibility guidelines and standards will be followed to ensure that content is readable, interactive elements are usable
- **Credible:** Users must trust and believe in the information and functionality provided by the AGRICORE platform. Design elements will be implemented and clear and accurate information will be provided to build trust, such as certifications and user testimonials.

These usability principles and patterns are systematically applied in the design and evaluation of the AGRICORE platform, with the objective of creating an effective, efficient and satisfactory user experience.

3 Usability evaluation

Given the critical role of the usability of the AGRICORE platform in determining its acceptance and effectiveness among users, evaluating it is crucial to ensure the desired engagement. Usability evaluation is concerned with how users learn and use the application to achieve their goals, as well as the level of user satisfaction. This ensures an intuitive and efficient user experience.

This section aims to systematically assess how well the AGRICORE interface meets the needs of its users, identifying strengths to build upon and opportunities for enhancement. To achieve a thorough understanding of the platform's usability, this section will delve into two fundamental aspects: the objectives of the evaluation and the methods employed to conduct the evaluation. The following sections will expand on the specifics of each objective and the detailed application of each method, ensuring that the AGRICORE Interface platform achieves its full potential as a user-centred, efficient, and widely adopted tool. By adhering to a structured usability evaluation process, it is possible to guarantee the development of an interface that is not only functional but also delightful to use.

3.1 Evaluation objectives

With the usability evaluation, the focus is on the collection and analysis of data related to the usability of the AGRICORE Interface platform, thus achieving several objectives:

- **Quality standards:** It is ensured that the AGRICORE application complies with the required standards, promoting its adoption and acceptance by end users.
- **Improvements:** Thanks to the evaluation, possible areas of improvement are detected, and new developments and functionalities are opened, resulting in a better user experience.
- **Valuable information:** Information that can be valuable from an analytical point of view is gathered.
- **Decision making:** It is essential to support informed decision-making by the development and project management team.

3.2 Evaluation methods

Several usability evaluation methods are used in order to obtain accurate and meaningful information about user experience and platform effectiveness. These methods are selected to ensure the validity and reliability of the results obtained. The main usability evaluation methods to be used in the process are presented below.

- **Usability testing:** Testing sessions are conducted with real users representing the different profiles and roles that will interact with the AGRICORE platform. During these tests, users will be asked to perform specific tasks while their interactions are recorded and information about their performance, completion times and feedback is collected. These tests will identify potential usability issues, friction points and areas for improvement. These tests are detailed in the "Usability Tests" section below.
- **Surveys and questionnaires:** Structured surveys and questionnaires are used to collect quantitative and qualitative information about the user experience with the AGRICORE Interface application. These tools will provide data on overall user satisfaction, perceived

ease of use, perceived efficiency and other relevant metrics to assess the usability of the platform.

- **Direct observation:** Direct observation sessions are conducted where evaluators will be able to observe and record user interactions with the AGRICORE platform in real-time. This methodology allows for capturing specific details of the interaction, identifying behavioural patterns and understanding the difficulties that users may face during use.
- **User Feedback:** Active participation of users is encouraged, and their feedback is collected through different channels, feedback sessions or individual interviews. This allows for having direct insights from users about their user experience, identifying previously undetected problems and generating ideas for continuous improvement of the usability of the platform.

All of these evaluation methods will be used in a complementary manner and will be applied over time, allowing for a continuous analysis of the usability of the AGRICORE platform. The results obtained from these methods will provide valuable information to guide design decisions, iterative improvements, and implementation of solutions that optimise the user experience and promote the successful adoption of the application.

4 Usability design

Usability is tied to the entire design process described in D4.3 including GUI, UX, workflow, mockups and platform design.

The AGRICORE interface has been built from the ground up based on the UX, which focuses on having a deep understanding of users, what they need, what they value, their abilities, and also their limitations. It also takes into account the business goals and objectives of the group managing the project. UX best practices promote improving the quality of the user’s interaction with and perceptions of your application and any related services.

A UX-centric design requires a process and methodologies to be followed to achieve the best results in the development. In [Figure 2](#), the steps that have been followed based on best practices are shown [\[3\]](#). Then, the sub-sections below explain each of them.

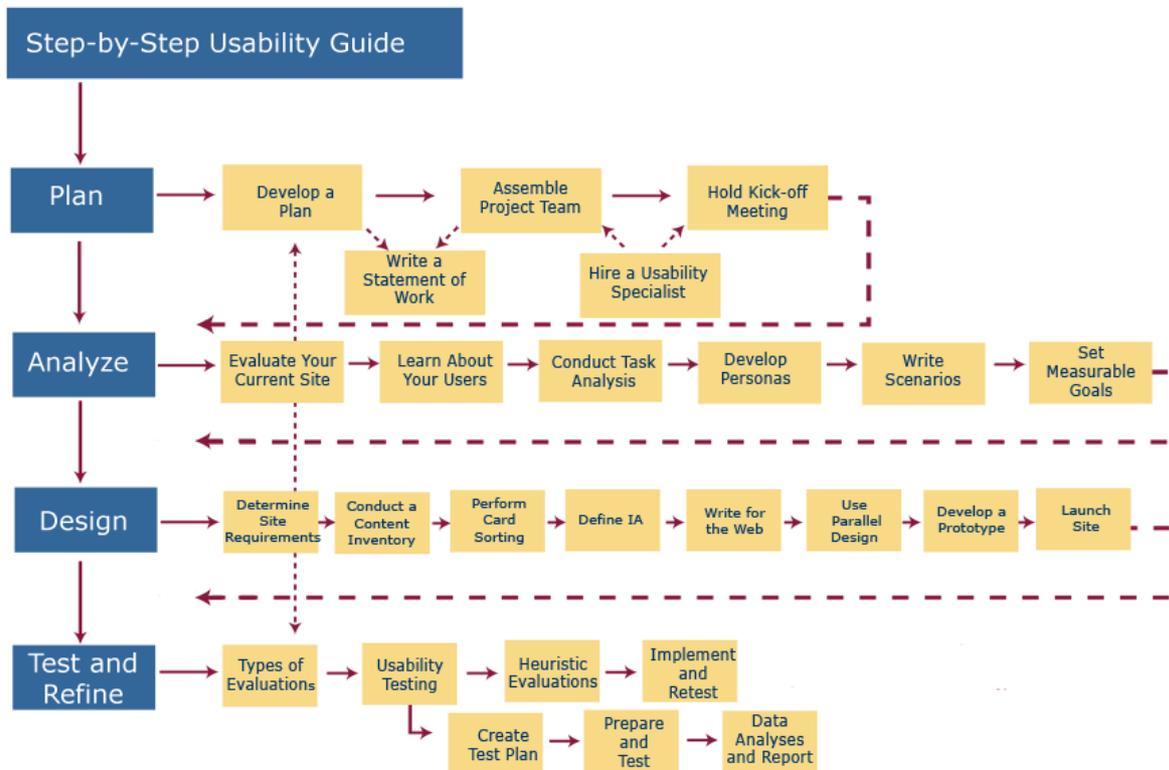


Figure 2 Usability guide

4.1 User Research

The first step involves conducting research on the potential users to whom the application is targeted in order to ensure that the application can meet the main needs of these users. To carry out this research, the technique of personas has been employed, which involves creating a representation of our customers with the aim of gaining a more personal and in-depth understanding of the platform’s target audience. With this technique, the consideration of users’ needs is higher, obtaining additional support when making decisions regarding design aspects and key functionalities.

Specifically, in this case, this technique will be applied to learn more about the potential users that the AGRICORE Interface could have, with the purpose of developing new features that

attempt to meet the needs of these profiles. Thus, profiles, such as those presented below, have been defined:



Figure 3 Potential profile of the application 1



Figure 4 Potential profile of the application 2

4.2 Prototyping

To provide an initial glimpse of the appearance of the application interface, a series of interactive prototypes have been created using Figma, which can be viewed at the following link <https://marvelapp.com/prototype/6ab0ch2/screen/80517030>. In deliverable D4.3, a detailed walkthrough of each screen was conducted, highlighting the specific features of the different screens. These mockups were used to have an initial idea of the aspect of the screens in the AGRICORE tool, facilitating the interaction with end-users and the evaluation of its usability.

4.3 Application experience

This section will detail how the navigation of the application has been implemented. It is important that the navigation is concise, visually clear and easy to understand for all the roles contained in the application. In [Figure 5](#), the different sections and the access to these defined parts of the application are shown.

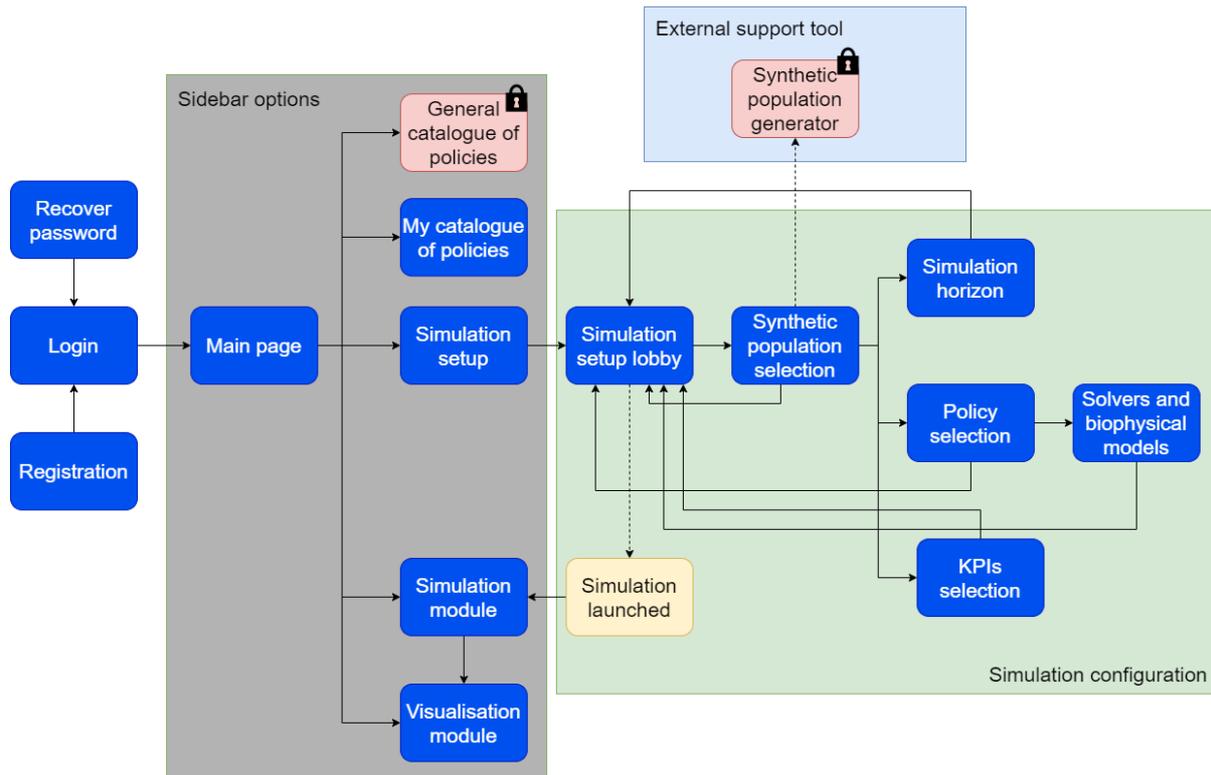


Figure 5 Navigation flow

This navigation design aims to provide an intuitive experience for users, allowing them easy access to key features of the AGRICORE Interface. The application features a control panel allowing users to navigate through different sections. The control panel includes a navigation bar for users to move across various sections of the application.

The primary navigation of the application is divided into three sections:

- **Home:** This section provides a summary of simulations the user has conducted and allows initiating a new simulation.
- **Simulation:** This section enables users to configure and execute a simulation.
- **Visualization:** This section allows users to view the results of a simulation.

The **Home** section has two main options:

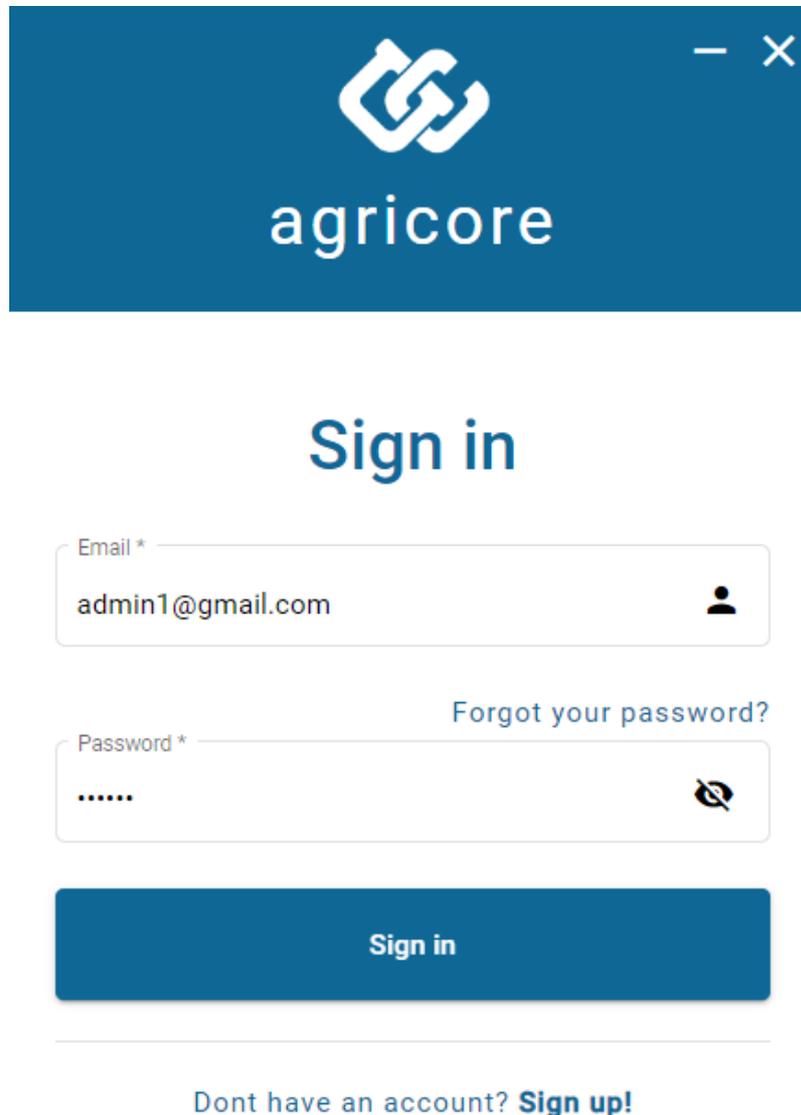
- **Login:** This option allows users to log into the application.
- **Registration:** This option enables users to register for the application.
- **Recover your password:** This enables users to recover their password.

4.4 Platform Screens

After showing the navigability of the platform, this section details the different screens that form part of the platform, explaining their components and design.

4.4.1 Login

This screen (see [Figure 6](#)) serves as the gateway for users to access the platform. It offers options for users who are returning visitors as well as those who are new to the platform or need to recover their account information.



The login screen features a blue header with the Agricore logo and name. Below the header, the text "Sign in" is displayed in a large, bold font. The form consists of two input fields: "Email *" with the value "admin1@gmail.com" and a user icon, and "Password *" with masked characters and a toggle icon. A "Forgot your password?" link is positioned above the password field. A large blue "Sign in" button is centered below the fields. At the bottom, a link reads "Dont have an account? Sign up!"

Figure 6 Login screen

4.4.2 Home screen

Once the user has logged in, the user will see a home screen (see [Figure 7](#)), which serves as the central hub of the application, providing users with quick access to various functionalities through a side menu navigation system. Users can easily navigate between different sections of the application, such as the main page, simulation setup, visualization, catalogue of policies, user management, and help resources, which will be presented in the following sub-sections.

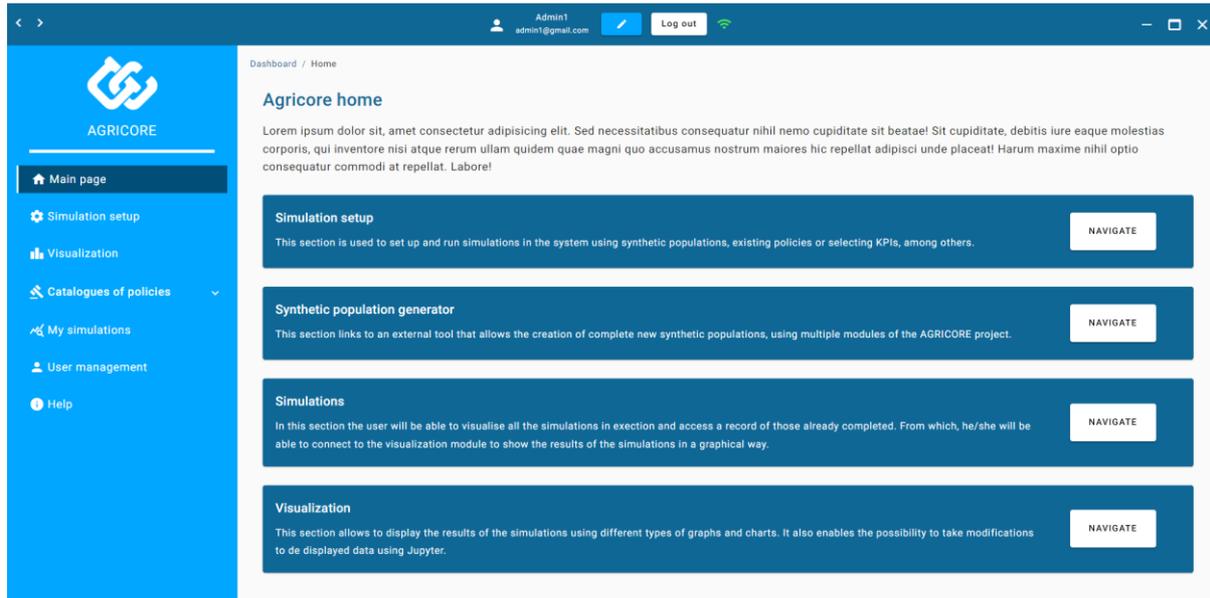


Figure 7 Home screen

Moreover, the above screen has a navigation bar where the controls of a desktop application can be found (see [Figure 8](#)). These controls are the controls of a conventional desktop application. The controls, from the right to the left, are composed of:

- **Close application**
- **Shrink / Maximize size**
- **Minimize application**
- **Go back (navigation)**
- **Go forward (navigation)**

In the middle, the user name and her/his email appear together with the icon of a person and a box with a pencil on the right. This box enables the user to edit her/his name and email and other personal information. On the right of this box, there is another one to log out the current session, and on the right of that, a symbol indicates the APIs that the platform is connected to.



Figure 8 Navigation bar

4.4.3 Simulation setup screen

Another of the main screens is the "Simulation setup" ([Figure 9](#)). This screen facilitates the setup of simulations by guiding users through the process of entering data for each simulation. It features a stepper that assists users in filling out the required sections of the simulation, including synthetic simulations, products, policies, simulation configuration, and launch options. Within each section, the app provides mandatory fields for users to complete. Once each mandatory section is filled, the "Next" button at the bottom of the page is enabled to continue with the next step.

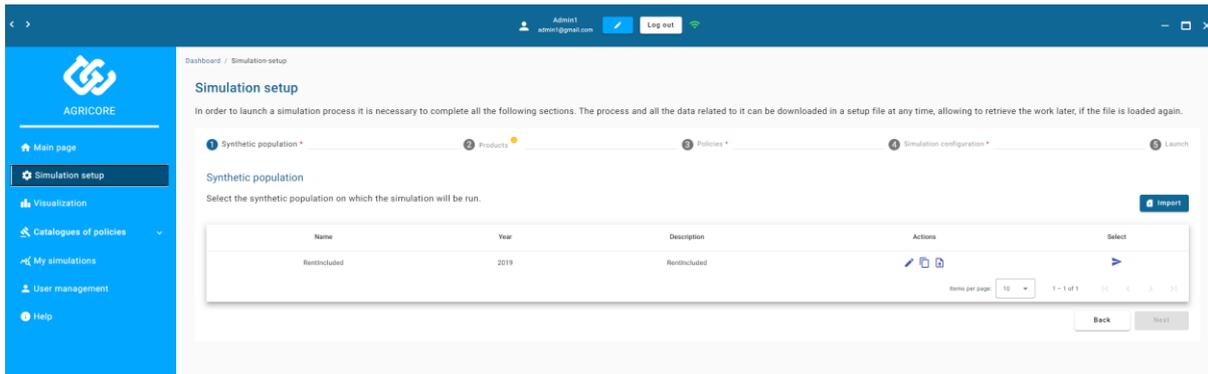


Figure 9 Simulation setup page

4.4.3.1 Synthetic population

In this step of the simulation, the synthetic population on which a simulation is to be run is selected (see [Figure 10](#)). The user can select one of the policies listed in the table, which can be edited in terms of the number of rows shown. For each population, its name, year and description appear in different columns. The penultimate column has three icons to edit, copy and export the population, in that order. The final column is used to mark if the synthetic population is chosen.

In order to launch a simulation process it is necessary to complete all the following sections. The process and all the data related to it can be downloaded in a setup file at any time, allowing to retrieve the work later, if the file is loaded again.

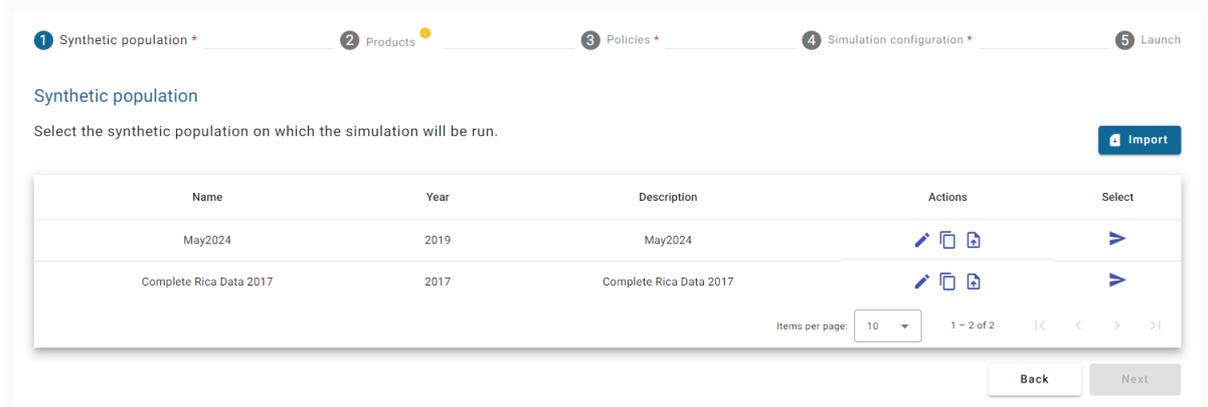


Figure 10 Synthetic population

4.4.3.2 Products

After choosing the synthetic population, this screen simply shows an information message to indicate the aggregation of crops for the selected population according to their representativeness. [Figure 11](#) shows the screen for the simulation of a synthetic population of the Italian use case.

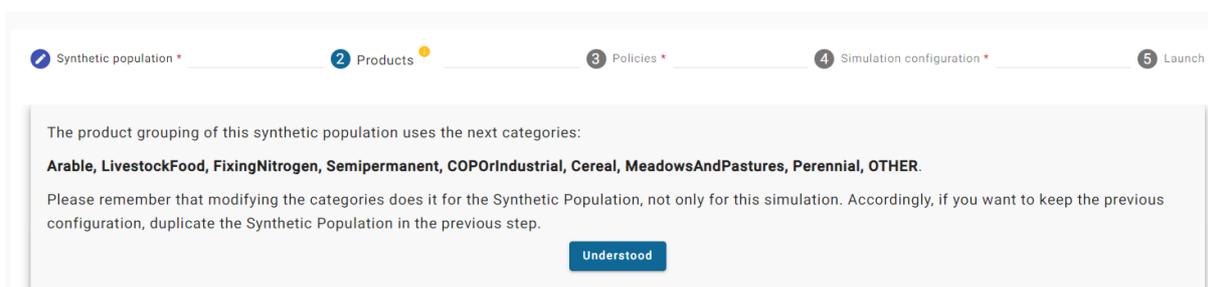


Figure 11 Products screen for the Italian use case

4.4.3.3 Policies

The next step is to choose the agricultural policy that the end-user wants to simulate. [Figure 12](#) shows the screen through which agricultural policies can be added.

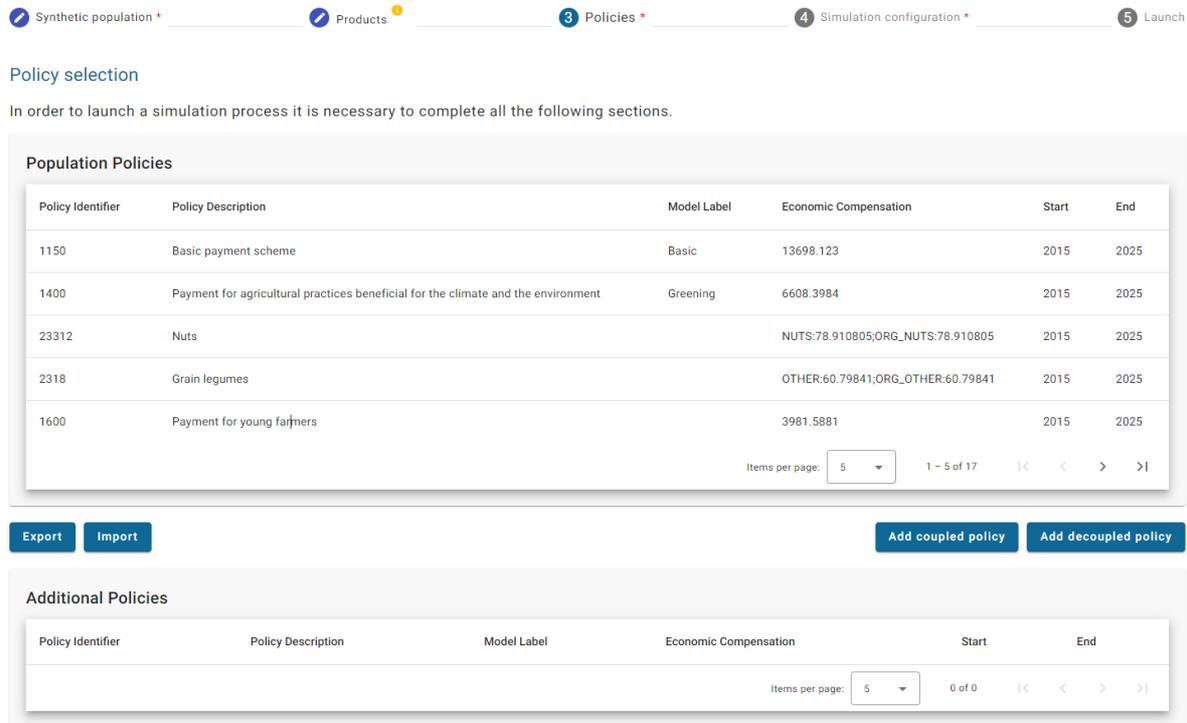


Figure 12 Policies screen

4.4.3.4 Simulation configuration

The screen shown in [Figure 13](#) is for configuring aspects related to the simulation horizon and the selection of the repository branch from which to load the short-period and long-period models. Additionally, an advanced simulation configuration box allows for defining further aspects of the simulation, such as queue suffix and disabling long-period, land market and compress.

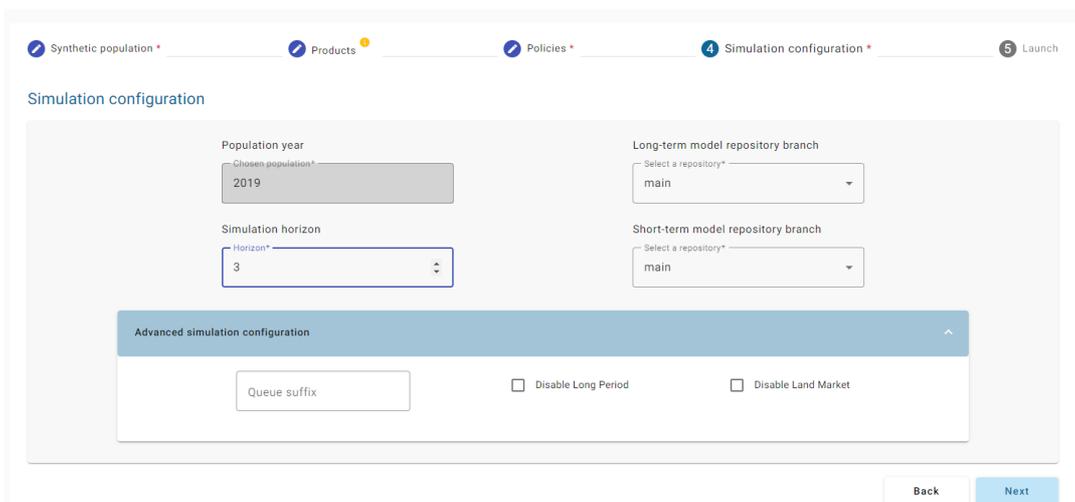


Figure 13 Simulation configuration

4.4.3.5 Launch

The Launch screen (Figure 14) presents a summary of the simulation parameters and a button to launch the simulation.

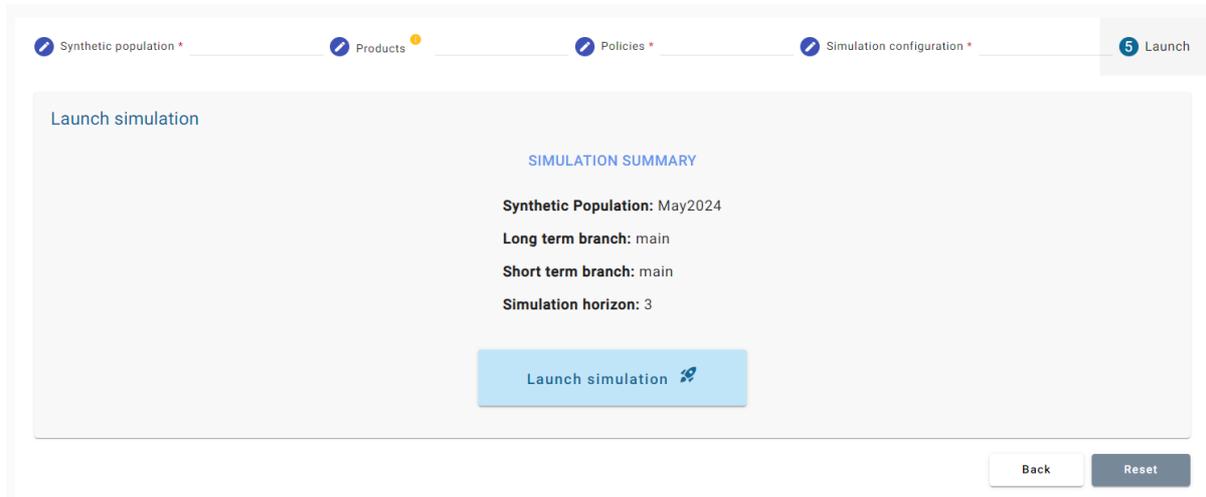


Figure 14 Launch

4.4.4 Visualization screen

This screen in the AGRICORE Interface ensures smooth navigation and seamless interaction with KPIs, providing an intuitive and efficient experience to graphically represent simulation results.

All this is possible thanks to the integration of Superset into the platform. This Apache technology offers a dynamic and customisable visualisation of the data, allowing users to adjust the graphs according to their specific needs, making it easy to identify trends and patterns relevant to decision-making. This is possible thanks to some filters that customise the plotted information. These include the simulated synthetic population, the simulation years and the NUTS regions. An example of the use of the filter menu is shown in Figure 15.

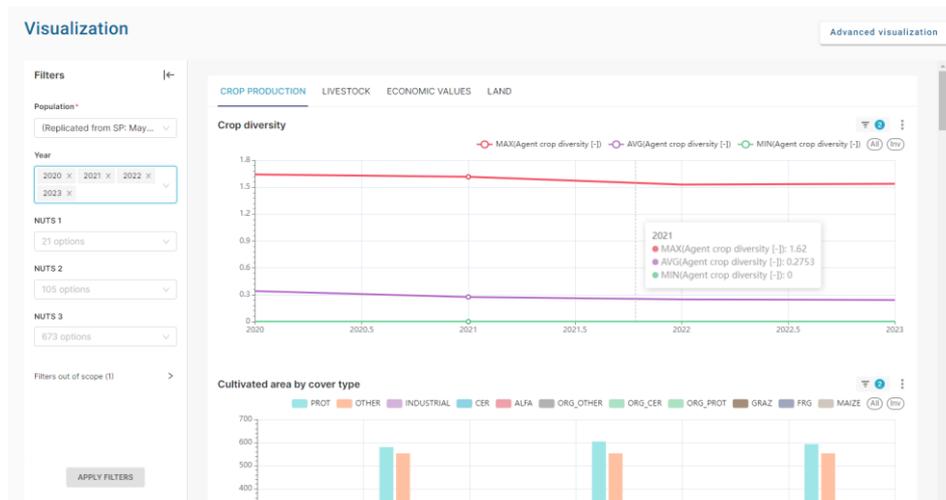


Figure 15 Visualization filters

The design of this screen enables users to quickly access key information to optimise their assessment. The graphs are grouped in tabs, in which different variables are tracked, including the KPIs defined in WP5, which are included in the "ECONOMIC INDICATORS" and "SOCIAL INDICATORS" tabs. [Figure 16](#) is a sample graph of this screen.

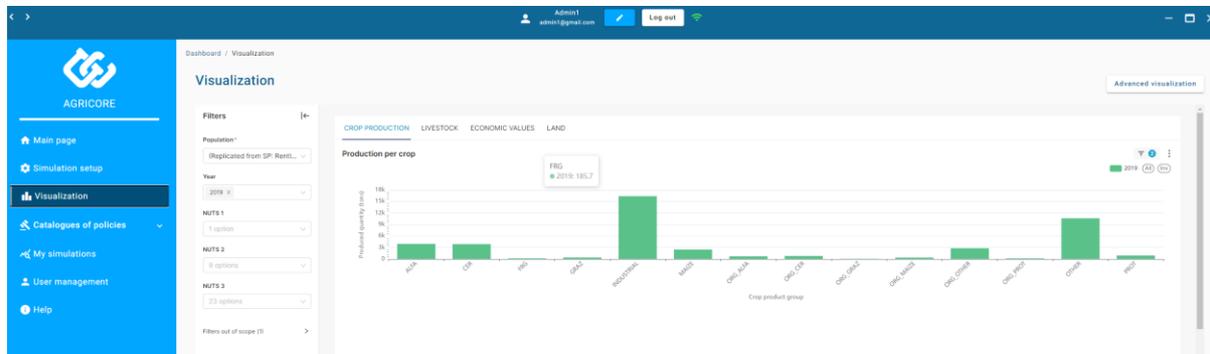


Figure 16 Visualization page

4.4.5 Catalogue of policies screen

There is another section in the platform called "Catalogue policies" that provides a clear and efficient way of managing agricultural policies for the users of the platform. This section was initially divided into two distinct categories: General catalogue of policies and My catalogue of policies. However, the complexity of introducing customised policies led to its reduction to a single general catalogue of policies. This screen (see [Figure 17](#)) lists the currently available policies and enables users to create new agricultural policies.

General catalogue of policies

Manage the general policy catalogue of the platform adding, editing or deleting the policies contained in it.

General policies

Platform's general catalogue of policies: + Create a new policy

Name	Type	Options
1	1.0079	H
2	4.0026	He
3	6.941	Li
4	9.0122	Be
5	10.811	B

Items per page: 5 | 1 - 5 of 20 | < >

Figure 17 General catalogue of policies screen

4.4.6 User management screen

The user management section (see [Figure 18](#)) of the AGRICORE interface provides a comprehensive and efficient tool for managing the platform's users. Here, administrators have access to a variety of functions that allow them to easily manage their institution's list of users. In this section, administrators can perform operations such as editing user profiles, allowing them to update information such as name, email or password. They also have the ability to delete users who no longer require access to the platform. An important feature of this section is the ability to view the institution's active users. This allows administrators to have real-time tracking of who is using the platform at any given time. In addition to managing existing users, administrators can also activate new users, providing them with access to the platform as needed.

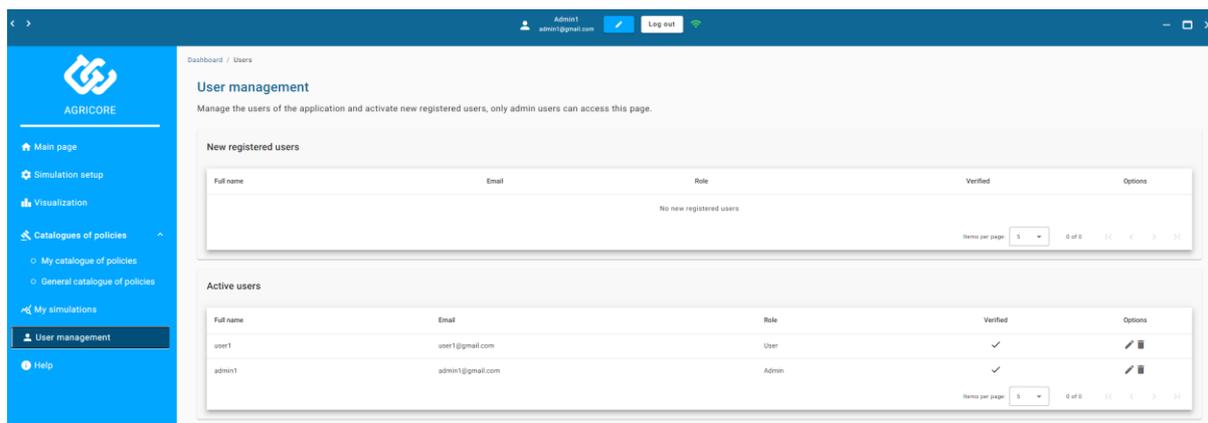


Figure 18 User management page

4.4.7 Help screen

There is a Help section where users can find basic operating instructions that will guide them through the main functions and features of AGRICORE.

In addition to the basic instructions, it has been also included a Frequently Asked Questions (FAQ) section where we address the most common queries asked by our users. Here, users can find clear and concise answers to their questions, helping them to quickly resolve any problems or doubts they may have.

5 Evaluation of usability principles

For assessing the ongoing development of the AGRICORE platform, it is essential to delve into how effectively it implements the key usability principles previously mentioned. The platform's evolution is not solely measured by its functionality but also by its adherence to principles that ensure a positive user experience.

- **Useful:** The AGRICORE platform remains focused on its utility. Through continuous feedback loops, we ensured that every feature and functionality added serves a clear purpose, directly addressing user needs. By prioritizing usefulness, we aim to create a tool that users can rely on to accomplish their tasks efficiently and effectively.
- **Usable:** Usability lies at the core of the AGRICORE platform design. We carefully develop user interfaces and workflows to be intuitive and straightforward, minimizing cognitive load and reducing the learning curve for new users. Through design and user testing iterations, we refine interactions to ensure that navigating the platform feels natural and seamless.
- **Desirable:** Through thoughtful design choices, including aesthetics, branding, and interactive elements, we cultivate an environment that users find engaging and enjoyable to interact with.
- **Findable:** We implement robust search functionalities, intuitive navigation structures, and clear labelling to ensure that users can quickly locate the content or features they seek. By prioritizing findability, we empower users to efficiently access the resources they need, enhancing their overall experience. Examples of these features may be the side navigation bar where users can locate the different functionalities or breadcrumbs on each page that indicate the users where they are and where they come from.
- **Accessible:** Thanks to the simplified design, no advanced computer skills are required, thus covering a larger number of potential users.
- **Credible:** The AGRICORE project is composed of professionals from multiple sectors with great expertise in their field, mainly in agriculture, technology and big data.

Below, some examples of the improvements made to follow the aforementioned principles are described. These are proof of how the evaluation of usability principles has allowed for detecting aspects to be enhanced based on the initial designs (mockups).

First, the most significant improvement can be observed on the "Simulation setup" page. Initially, the mockup of this page implemented links for the different steps needed for the simulation. It was found that this worsened the user experience, slowing down the setup process. To improve this, we made use of a stepper. This allows the user to see at which step of the setup s/he is and which ones are left uncompleted while also reducing the number of clicks needed to navigate from one step to another. The setup process also starts directly in the first step, reducing not only the number of clicks but also the number of navigations the users need to do before starting the setup process.

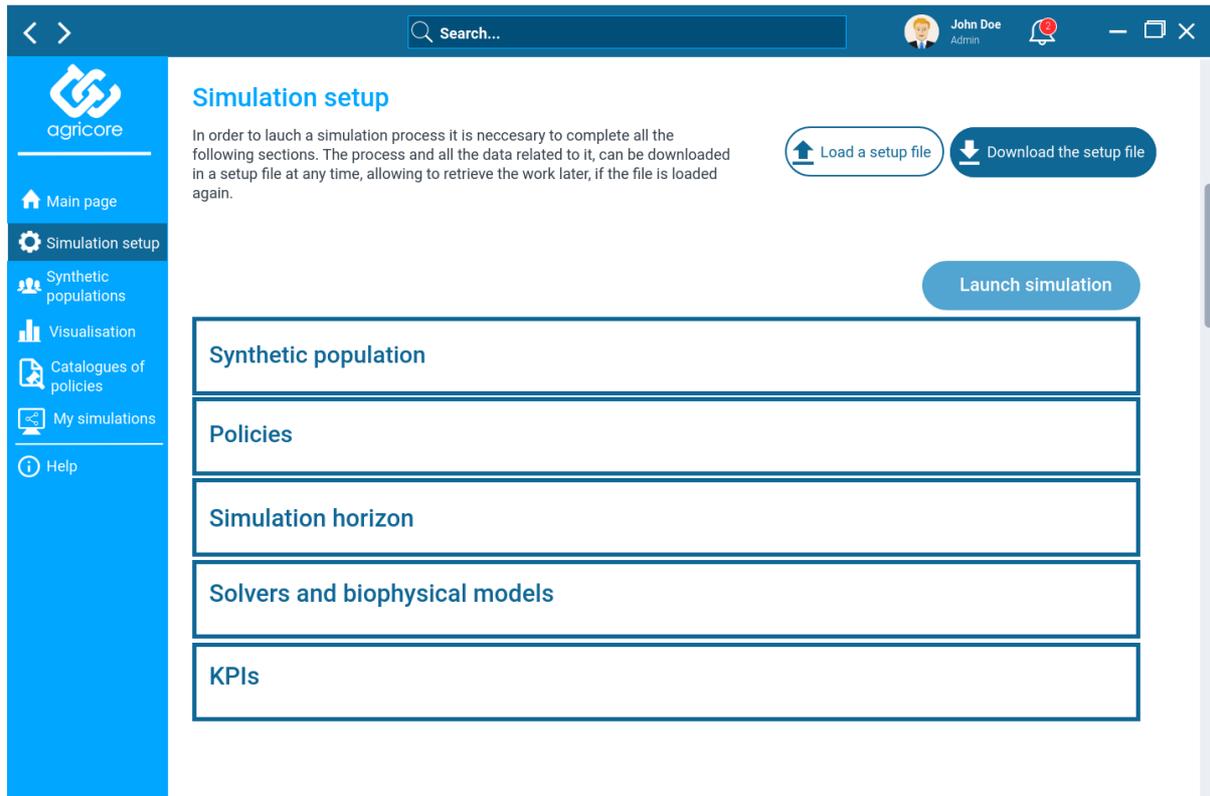


Figure 19 Mock up of the "Simulation setup" page

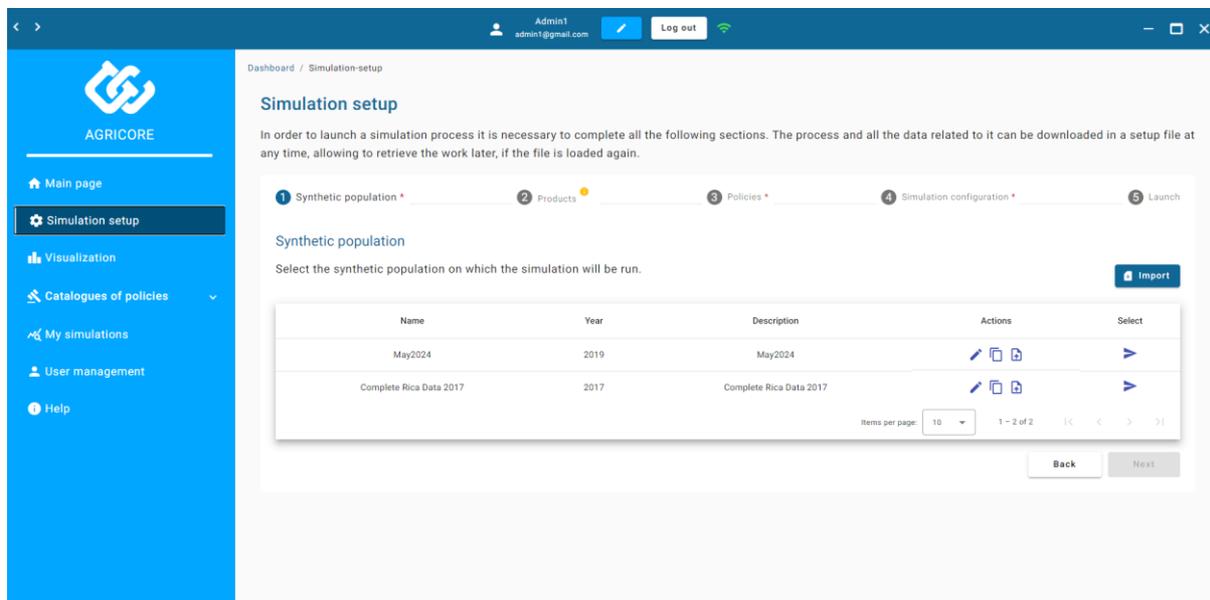


Figure 20 Final "Simulation setup" page

Regarding the "Synthetic population" step, in the initial mockup, there were multiple sections for different user actions. However, we identified some issues with this layout. Firstly, the sections were not sequential, making the interface harder to navigate. Secondly, selecting a population was limited to an input field, which did not offer enough information, making it difficult to identify the desired population. To address these issues, we redesigned this step to feature a table as the

main focus. This allows us to provide more information about the population and reduces the cognitive load required to operate the platform

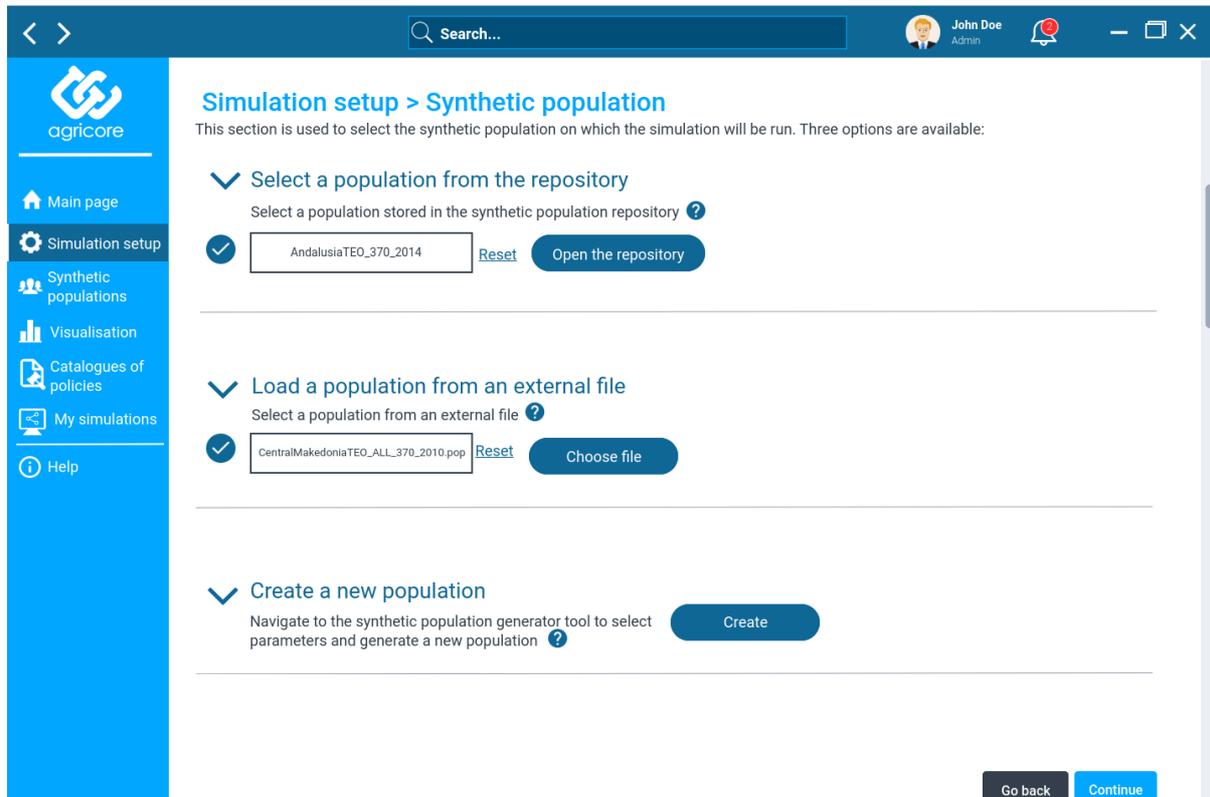


Figure 21 Mockuo of the "Synthetic population" screen

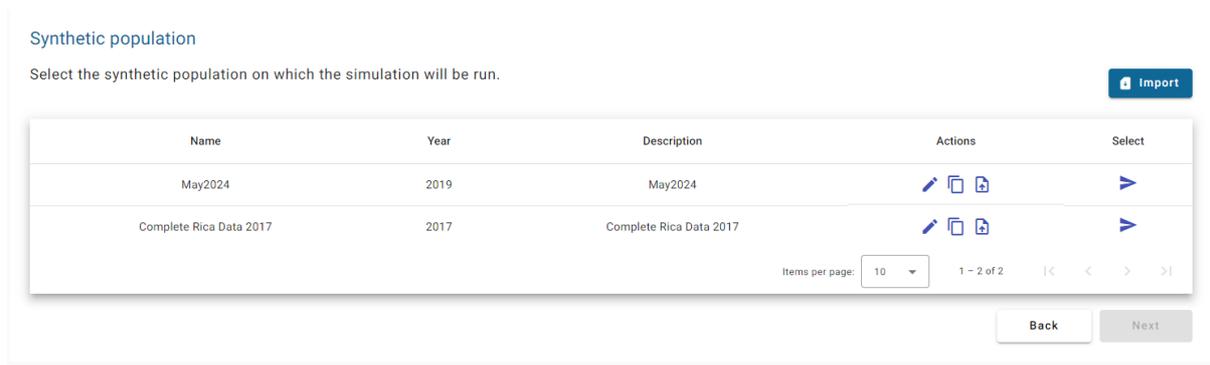


Figure 22 Synthetic population table

6 Usability tests

In the evaluation process, User Acceptance Testing (UAT) allows us to identify potential usability issues, collect data on the user experience and obtain valuable information to make iterative improvements in the design and functionality of the platform while ensuring that functional requirements are met (see next section table to see the relation between the tests and the requirements).

As explained in D4.7, test runs are performed in combination by the AGRICORE Interface development team and the different module representatives (Data Warehouse, ARDIT, and ABM Simulation Module), executed in view or approval mode. The tests are executed by a member of the team or a person designed to explain each use case to be executed to be coordinated with the attendants or executed by the user himself with the attendance of a member of the development team. For more information on usability tests, participants, preparation and test list see D4.7.

6.1 Traceability matrix of the UAT testing

Below, the definitions of the UAT tests carried out, grouped by module and requirement, are presented.

Table 1 UAT tests definitions

Module	Requirement	Test case ID	TC Description
AG.D16	AG.D16.FR.001-1-1	UAT-TC-01-002	Login in the application
AG.D16	AG.D16.FR.001-1-2	UAT-TC-01-001	User Registration
AG.D16	AG.D16.FR.001-1-3	UAT-TC-01-003	Recover account credentials
AG.D16	AG.D16.FR.001-2-1	UAT-TC-01-003	Synthetic population selection from a repository
AG.D16	AG.D16.FR.001-2-3	UAT-TC-03-002	Selection of Policies to be included in the simulation
AG.D16	AG.D16.FR.001-2-4	UAT-TC-03-003	Selection of Simulation Period
AG.D16	AG.D16.FR.001-3	UAT-TC-04-001	View ongoing simulations
		UAT-TC-04-002	Refresh ongoing simulations progress
		UAT-TC-04-003	View finished simulations
AG.D16	AG.D16.FR.001-4	UAT-TC-04-004	View detailed results for a finished simulation
		UAT-TC-04-005	Download a simulation result in PDF format
AG.D16	AG.D16.FR.001-5	User tests are not considered for these requirements since they do not provide the functionality to the user of the Agricore Interface application.	
AG.D16	AG.D16.FR.001-5-1		
AG.D16	AG.D16.FR.001-5-2		
AG.D16	AG.D16.FR.001-5-3		
AG.D16	AG.D16.FR.001-6	UAT-TC-02-001	Access to the main page and established navigations

6.2 Test report of the UAT testing

This section presents the results of the tests defined in the previous table. As stated previously, these tests are carried out by different team members. They were carried out in different iterations, taking note of the failed tests and possible improvements to ensure the constant

progress and correction of the platform. Below, more details about the issues detected in each iteration are provided.

In the first iteration, several issues related to data visualisation and user interface functionality were identified. However, with each subsequent iteration, the identified issues were addressed and resolved.

In the second iteration, the focus was on correcting visualisation errors and improving the user experience by eliminating simulation scenarios. In addition, the presentation of data was improved, showing clearer and more relevant information to users.

In the third iteration, the platform was further refined by adding new functionalities, such as a product grouping information tab, and technical issues, such as 404 errors in the page refresh, were fixed.

Finally, in the fourth iteration, full success was achieved, with zero failed test cases and no observations recorded. This suggests that the platform has reached a solid and stable state, ready to be deployed in production.

Table 2 Test report of the UAT testing

Iteration number	Total Test Cases	Failed Test Cases		Untested Test Cases		Observations
		Total	%	Total	%	
1	12	6	50%	0	0%	<ul style="list-style-type: none"> • Modify the tab with the Product Groups • Changes to synthetic populations are displayed in the simulation setup. • Add ignoreLP and ignoreLMM checkboxes to simulation scenario creation • Logs are not refreshing periodically
2	12	4	33,33%	0	0%	<ul style="list-style-type: none"> • When deleting a Simulation Scenario in the interface, the scenario and run are deleted, but an error message is received in the UI instead • Fix Log display • Display proper code for FADN product • Show Synthetic Population Name instead of ID in dropdown
3	12	2	16,66%	0	0%	<ul style="list-style-type: none"> • Add a new tab with product grouping information • Adapt simulation configuration stages • Fix 404 on refresh
4	12	0	0	0	0%	No observations

6.3 Further improvements

In previous sections of this report, we talked about the principles and patterns of usability. Among them, the principle of accessibility is mentioned and explained, which is applied in the platform with several strategies. However, this principle could be extended and applied to the platform in such a way that users with disabilities could be assisted. Some proposals for this purpose are presented below:

- Providing alternative text descriptions for charts and graphs to ensure they are accessible to visually impaired users relying on screen readers.
- Incorporating closed captions or transcripts for audio and video content to make them accessible to users with hearing impairments.
- Implementing keyboard navigation support and ensuring proper focus management to accommodate users who cannot use a mouse or have motor control limitations.
- Designing clear and readable text with appropriate colour contrast to facilitate reading for users with visual impairments.
- Offering adjustable font sizes and supporting high-contrast themes to accommodate users with varying visual needs.

7 Conclusion

Through a user-centered approach and the application of key design principles, AGRICORE has managed to create an experience that is not only useful and usable, but also desirable, accessible, and credible.

The implementation of an iterative approach, which includes continuous gathering of user feedback, has been crucial in ensuring that each feature added to the platform serves a clear purpose and addresses user needs. Notable examples of these improvements include the introduction of a stepper on the "Simulation Configuration" page, which streamlines the setup process by clearly outlining the necessary steps and reducing the number of required clicks. Furthermore, improvements in the "Synthetic Population" stage, such as adopting a table as the primary approach, have increased usability by providing more information clearly and concisely, reducing cognitive load for users.

Careful design of visual elements and intuitive navigation structure have also significantly contributed to the user experience, making it more engaging and easy to use. The presence of robust search functions, clear labelling, and consistent navigation have enhanced users' ability to quickly find the content and features they need. Finally, accessibility has been addressed through a simplified design that does not require advanced computer skills, thus expanding the platform's reach to a greater number of potential users.

8 References

1. U. S. G. S. Administration, Usability evaluation basics. Department of Health, 2013. [Online]. Available: <https://www.usability.gov/what-and-why/usability-evaluation.html>
2. U. S. G. S. Administration, User experience basics. Department of Health, 2014. [Online]. Available: <https://www.usability.gov/what-and-why/user-experience.html>
3. U. S. G. S. Administration, User-centered design process map. Department of Health, 2013. [Online]. Available: <https://www.usability.gov/how-to-and-tools/resources/ucd-map.html>

For preparing this report, the following deliverables have been taken into consideration:

Deliverable Number	Deliverable Title	Lead beneficiary	Type	Dissemination Level	Due date
D4.1	AGRICORE requirements and project management platform	AAT	Report	Public	M12
D4.3	Validated design for the AGRICORE interface	AAT	Report	Public	M39
D4.7	Report on testing and validation activities of the AGRICORE interface	AAT	Report	Public	M39