INATrace USER GUIDE

Sustainable Agricultural Supply Chains Initiative Trace

FOR PRODUCER ORGANIZATIONS

SASI Sustainable Agricultural Supply Chains Initiative

INATrace

The Traceability Tool for Sustainable Supply Chains

User Guide 2025

INA Sustainable Agricultural Supply Chains Initiative Trace

SASI Sustainable Agricultural Supply Chains Initiative

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Executive Summary

- INATrace is a digital open-source solution that puts people first. With the aim of improving the economic situation of smallholder farmers, INATrace focuses on the traceability of global supply chains. Better payment for producers at the beginning of the supply chain can only be secured if it becomes clear how little they receive for the raw material produced compared to other actors.
- Data on the supply chain, such as what prices are paid, which processing steps take place and which actors are involved, is stored digitally and, if desired, can also be viewed by consumers via a QR code. In addition, new functions for recording farmers' field polygons and satellite-based forest monitoring are being developed. Thus, the data collected in INATrace can be used to fulfil the due diligence requirements for the new EU Deforestation Regulation (EUDR).

- Companies in the processing, wholesale and retail sectors are being made responsible for their own supply chains with the introduction of the German Supply Chain Act (LkSG) and the EU Regulation on Deforestation-Free Products (EUDR). Compliance with human rights and the protection of forests is indispensable, especially at the beginning of global supply chains. In the market for traceability solutions, which currently is very fragmented, INATrace consistently builds on the requirements of those at the beginning of supply chains.
- With INATrace, cooperatives have the opportunity to say goodbye to paper or Excel-based systems and make their processes fully transparent and digital. They also retain ownership over their data, strengthening their negotiating position vis-à-vis buyers of their products.

Objectives

The objective of this user guide is to demonstrate step by step functionalities of all INATrace system modules to the users. The following are the specific objectives of this user guide:

- System users will understand the general background of INATrace system and how it enables traceability and transparency in agricultural value chains.
- Users will have a thorough understanding of INATrace and how it accommodates all value chain data.
- Users will have guidelines on how to use INATrace.

INATrace at a glance

- It is a digital **traceability** tool.
- It makes **agricultural commodities traceable**.
- It enables **transparency** among value chain actors and to the end-consumers.
- It allows **end consumers to learn and give feedbacks** about the product.
- It helps **producers** to digitalize their operations and have **data** that they can analyze and present.

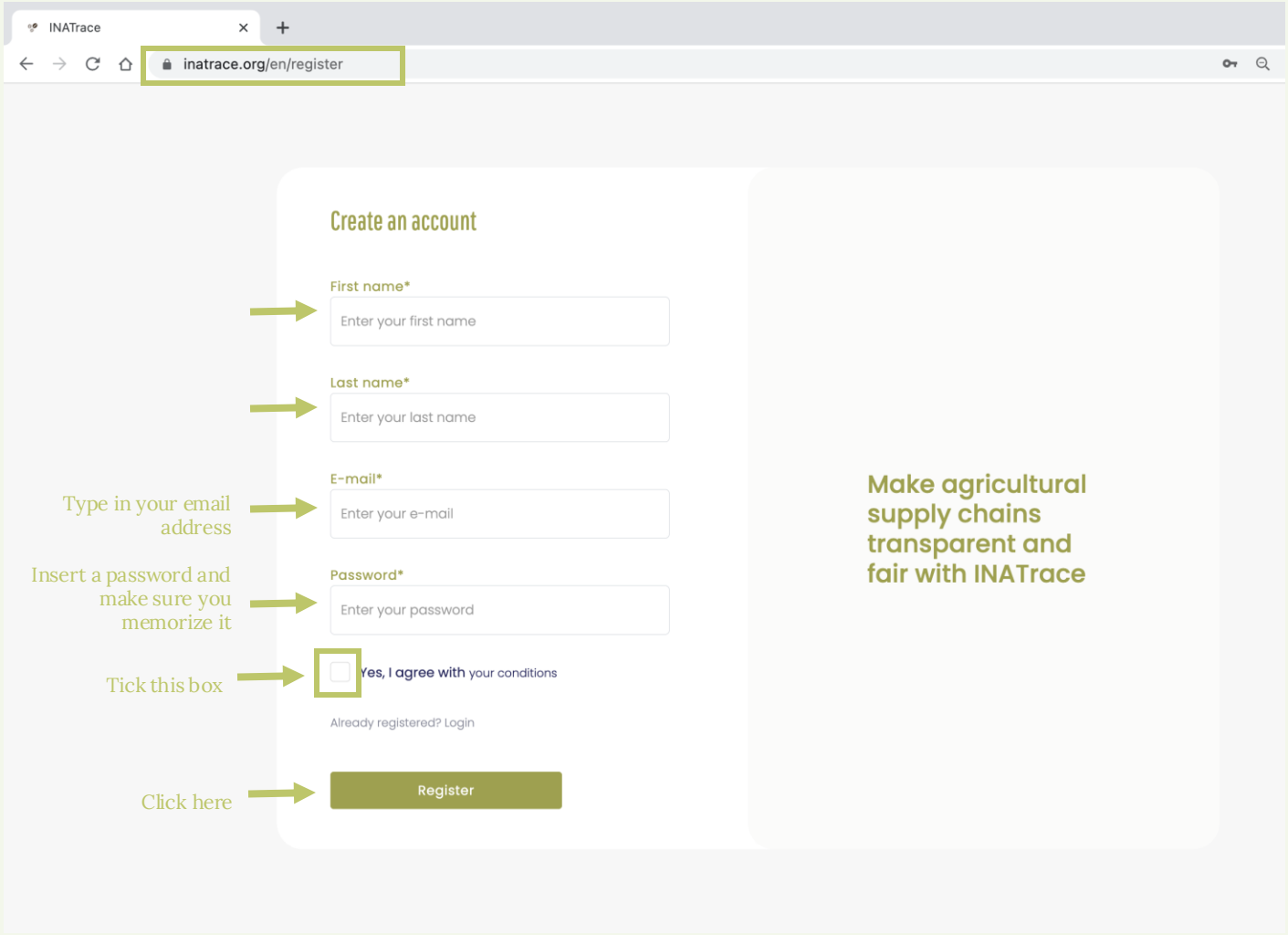
Chapter 1.

Getting Started with INATrace

INATrace is accessible using any modern browser (e.g. Chrome or Microsoft Edge) through the URL: https://inatrace.org/

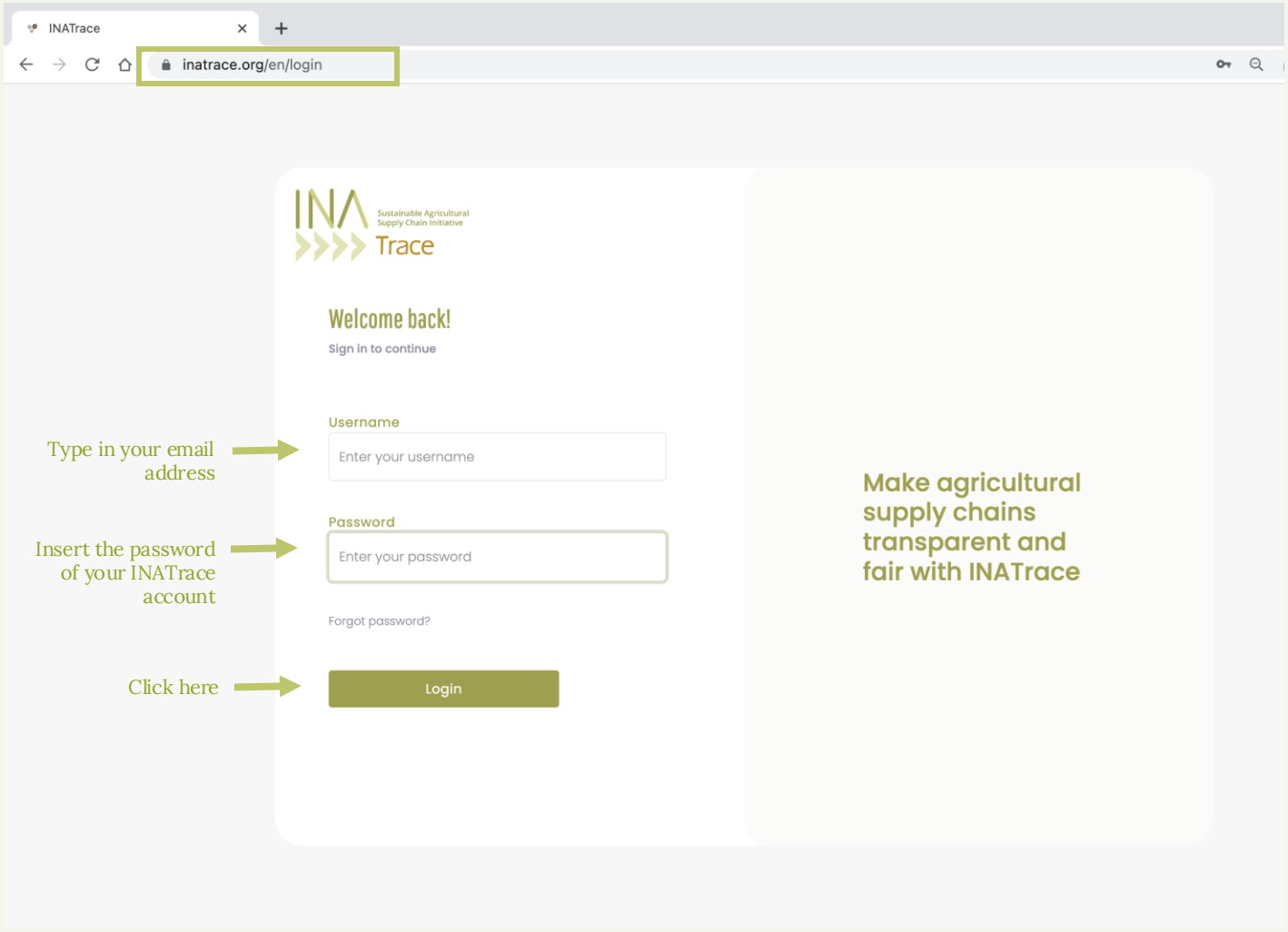
1.1 Register in the system

In order to register a user account on INATrace, access https://inatrace.org/en/register and proceed by filling in the registration form below. After filling in all the required inputs, click on register and ask your INATrace contact person to approve your account.



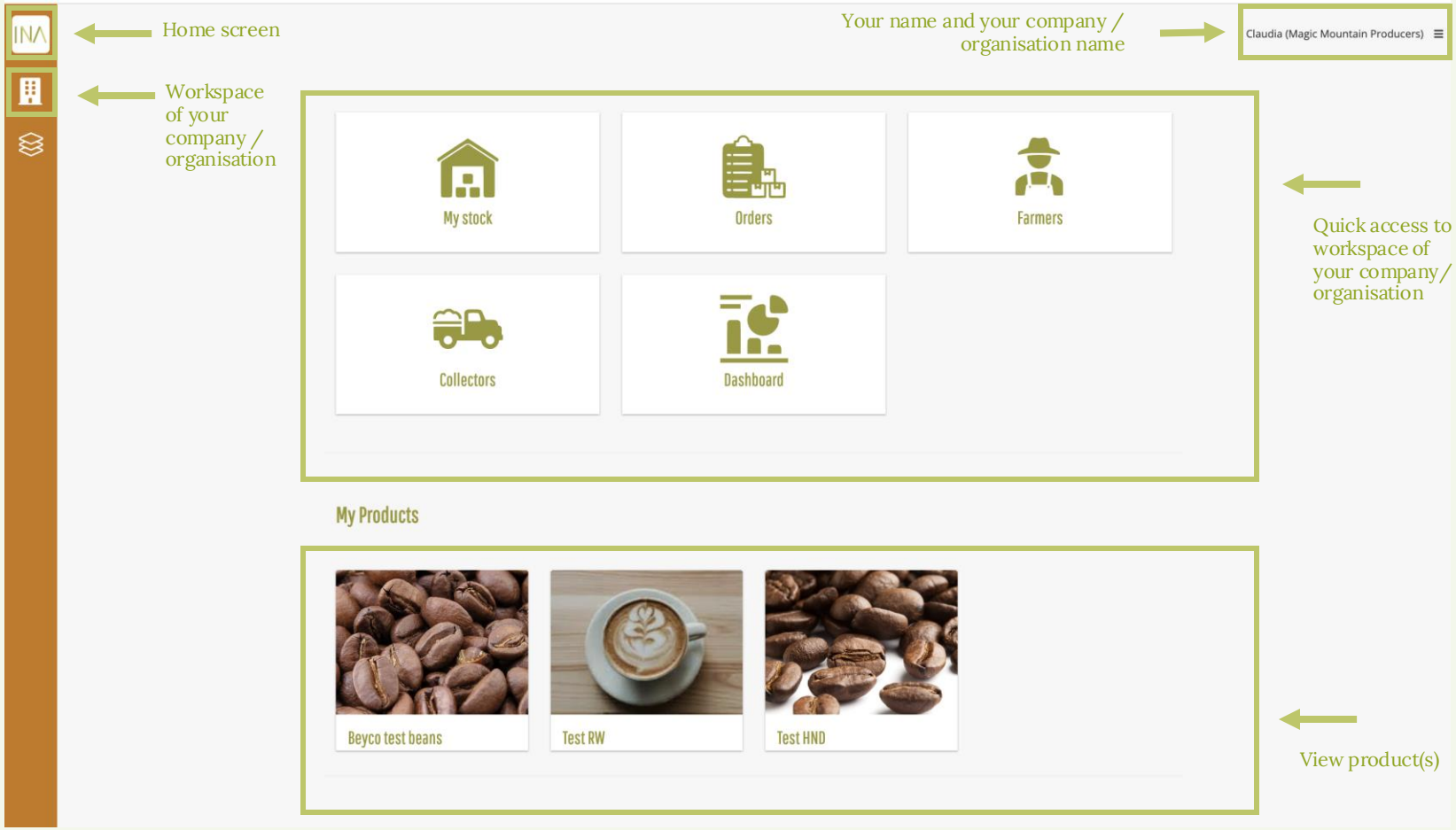
1.2 Access to the system

Once your account has been verified and activated, you can click on “Login” on https://inatrace.org/ and input your email and password to enter the system.



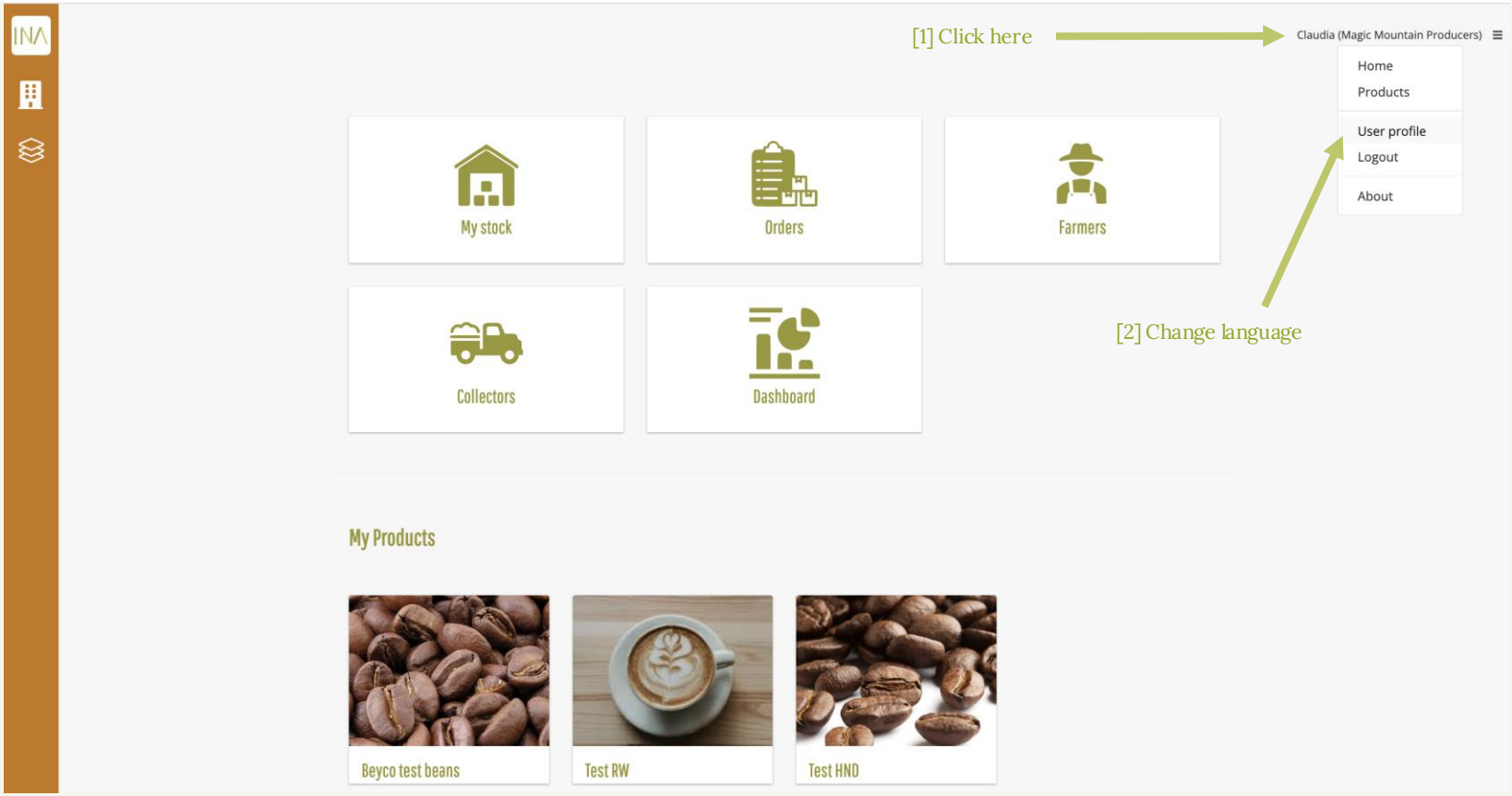
1.3 Overview of the user interface

Once you have successfully logged in into the system, the first page you see is the homepage (see below). On the same page, there are different tiles and icons that help you perform various tasks in the system.

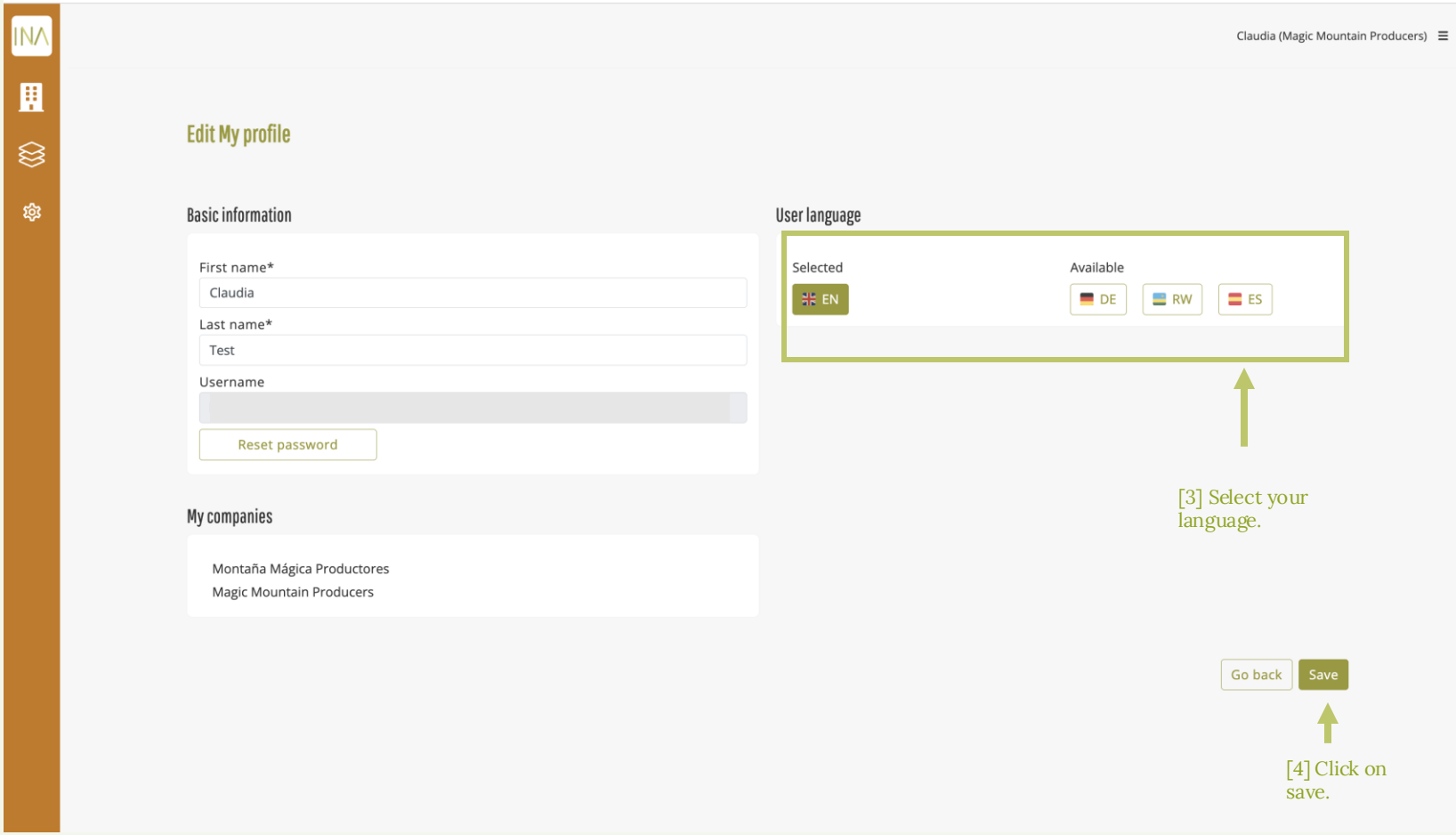


1.4 Language settings *(English, Kinyarwanda, Spanish and German)*

To change the system language, click on the menu icon in the top left corner, then click on user profile.



On the screen that appears, locate, and select the language of your choice under user language then click on save button at the bottom of the page to validate change of language.



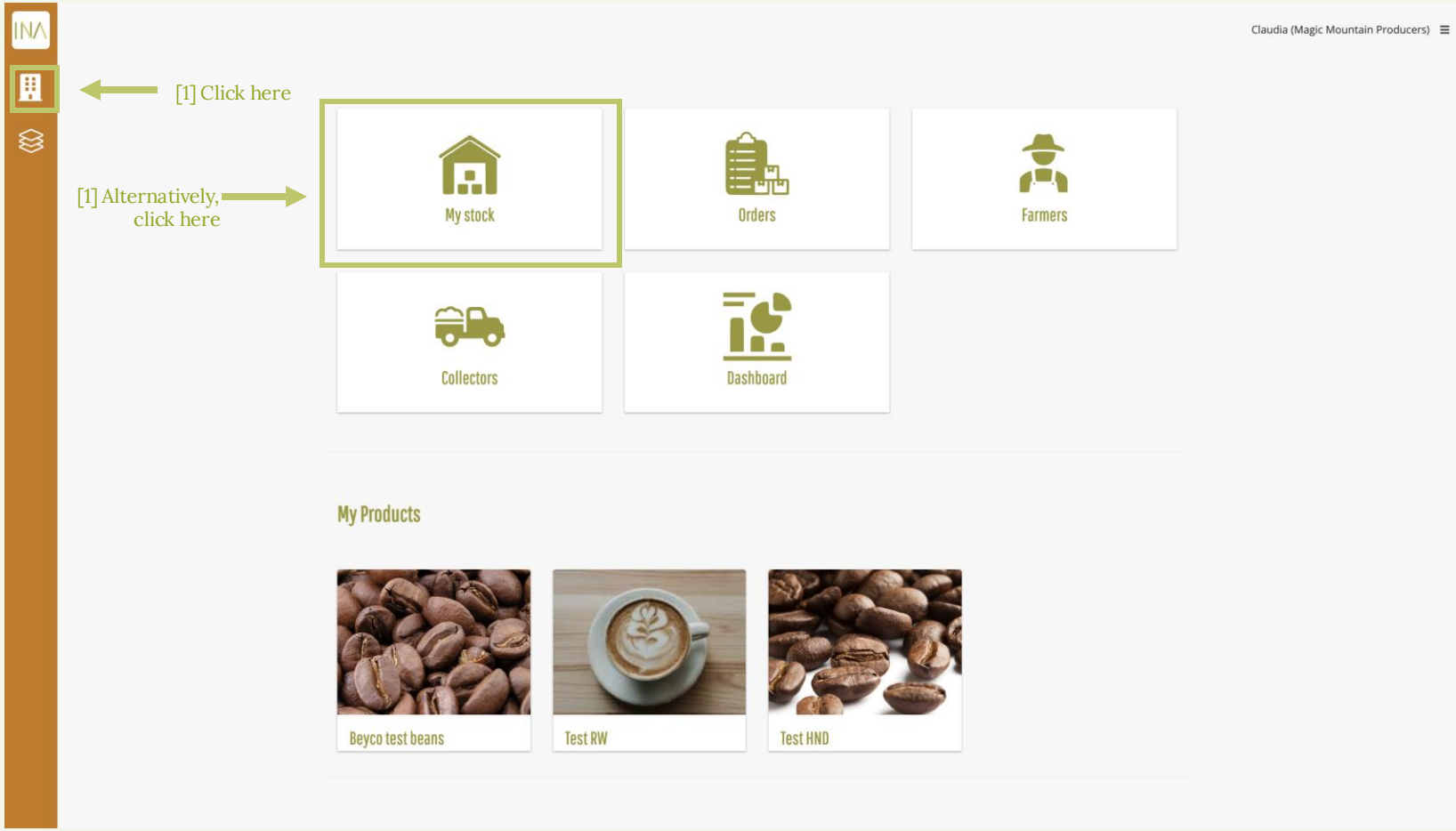
Chapter 2.

Delivery Module

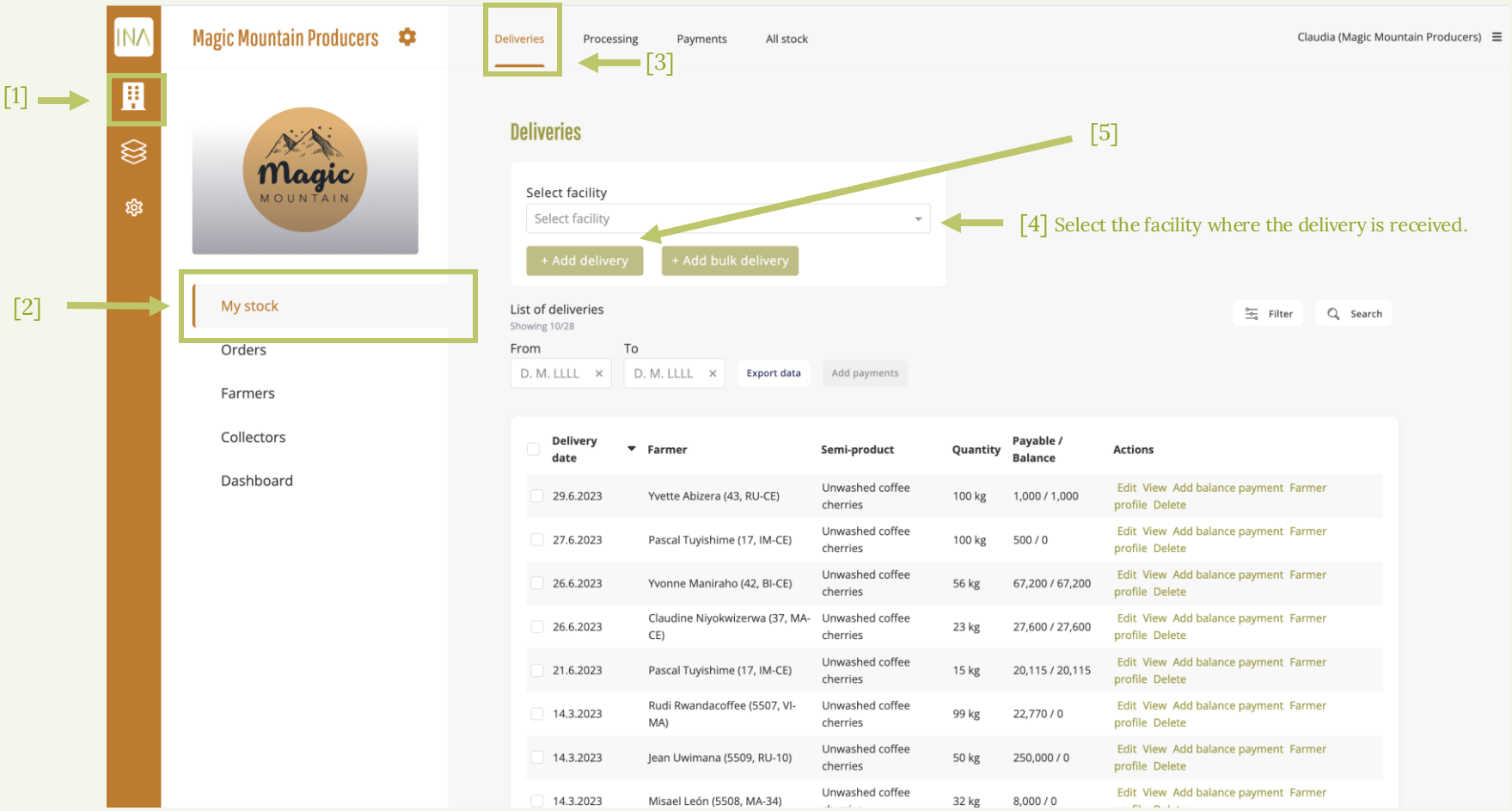
The system gives its user the ability to record either a single delivery or multiple deliveries all at once.

2.1 How to record a single delivery

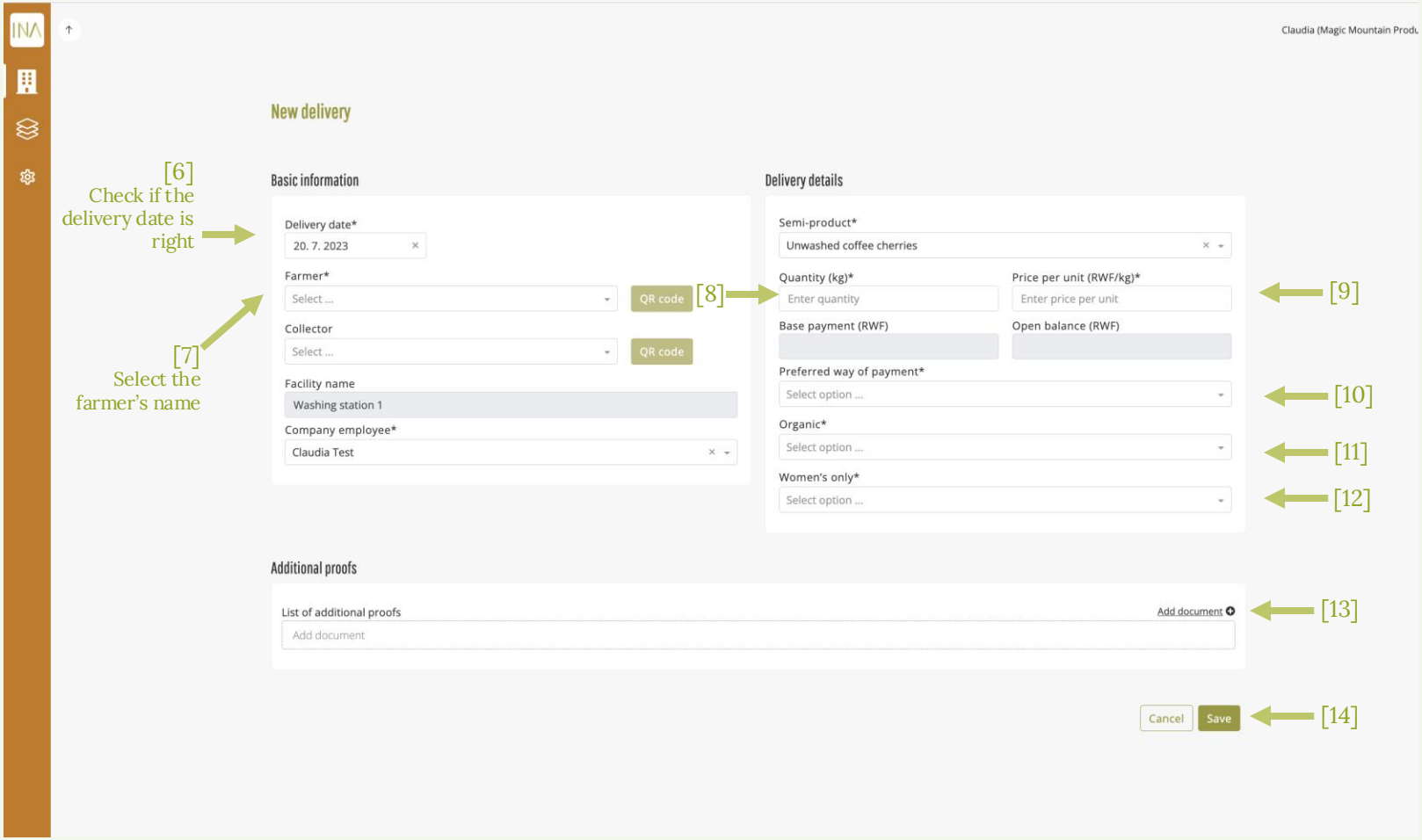
To record a single delivery, click on the “Company” icon as shown on the screenshot below which leads you to “My Stock”. You can also go direct to “My stock” tile as shown below.



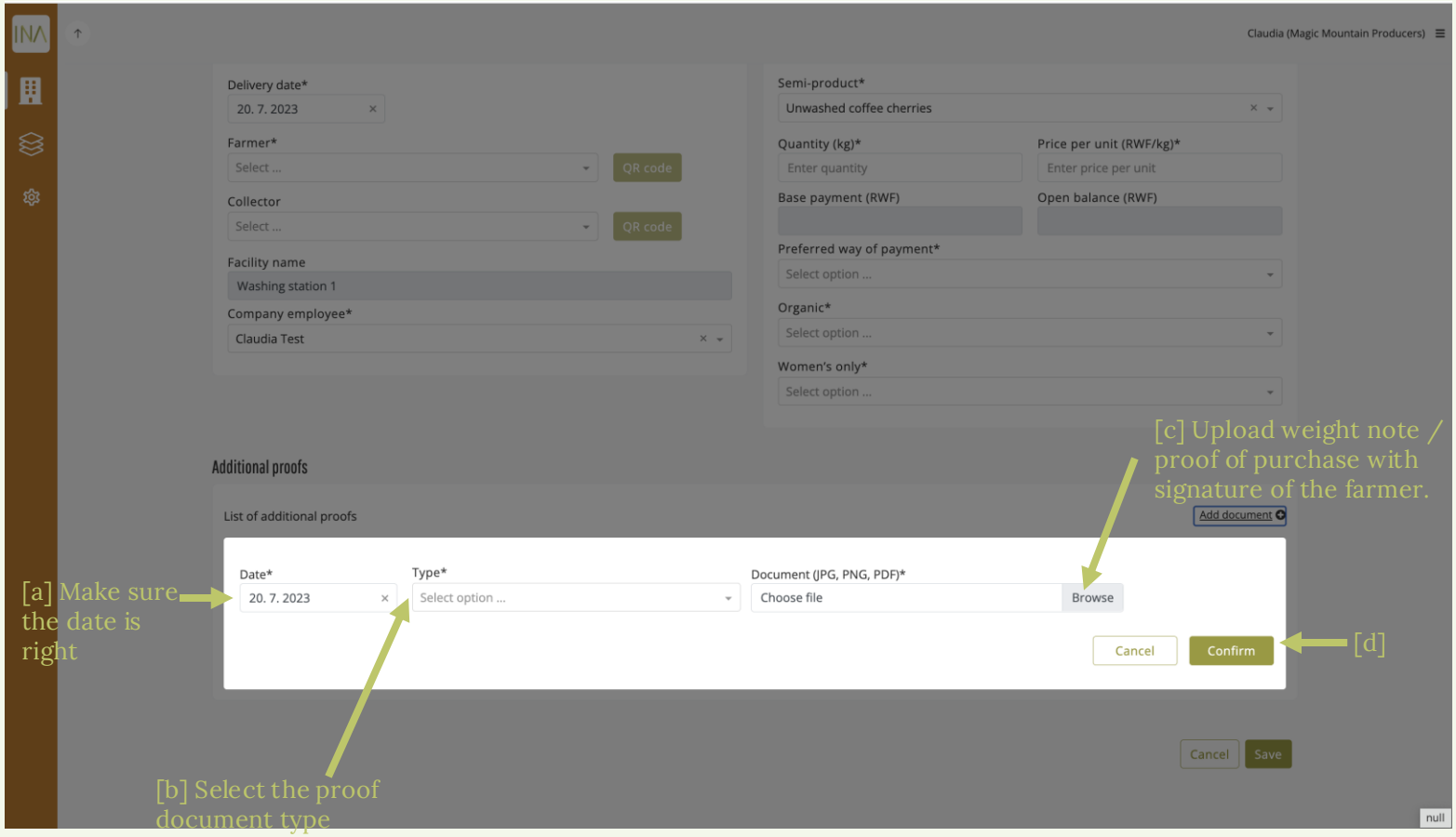
Once you are on the my stock page, follow the indicated steps to add a single delivery.



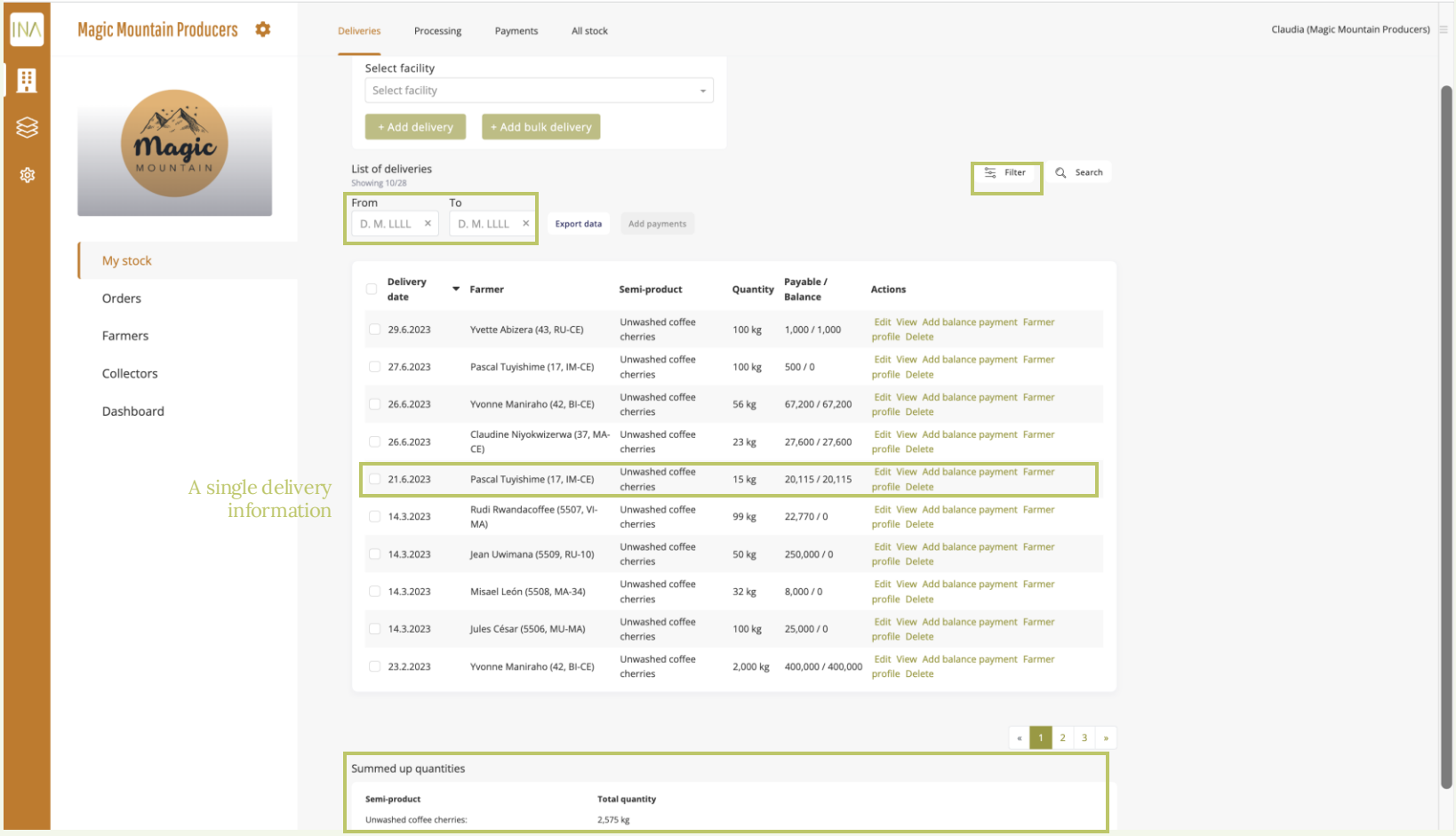
After clicking on “Add delivery” button, this page will appear, which gives you the ability to record all required information related to the delivery. You will be required to supply information such as delivery date, farmer’s name, quantity delivered, price per unit, farmer’s preferred way of payment, product characteristics – if applicable for your company (organic or women’s only) and additional proof. Follow the indicated steps:



Here are steps of ”Adding a proof document” of the purchase.

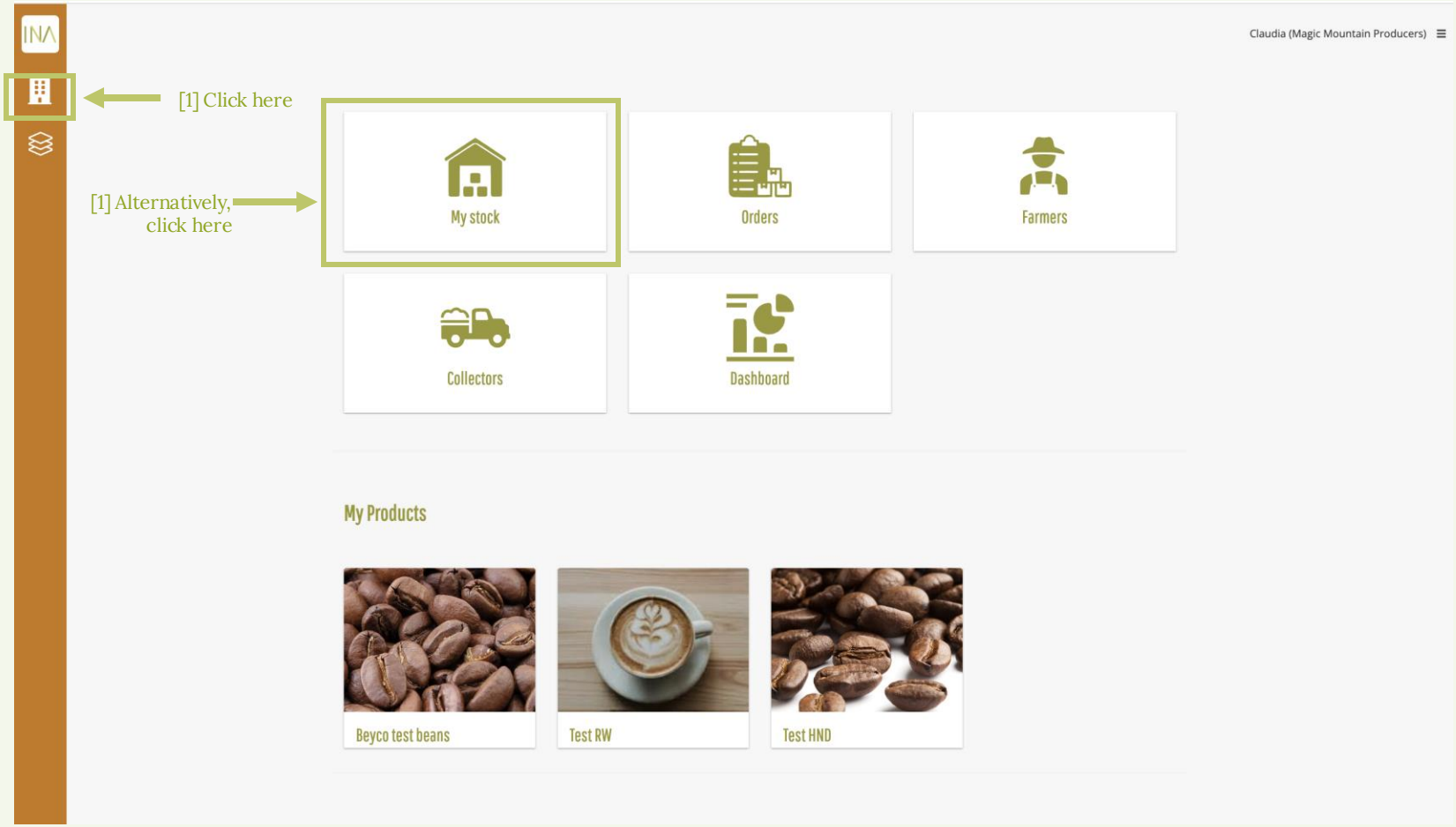


Here you have access to a list of concluded deliveries "**List of deliveries**" where you are able to make some modifications to a particular delivery by editing information related to it, viewing the delivery, adding payments or even deleting the delivery. The bottom part shows the "**Summed up quantities**" delivered which can be searched per facility, date of delivery or any period of time. The "**filter**" icon is an additional help when searching for specific deliveries.

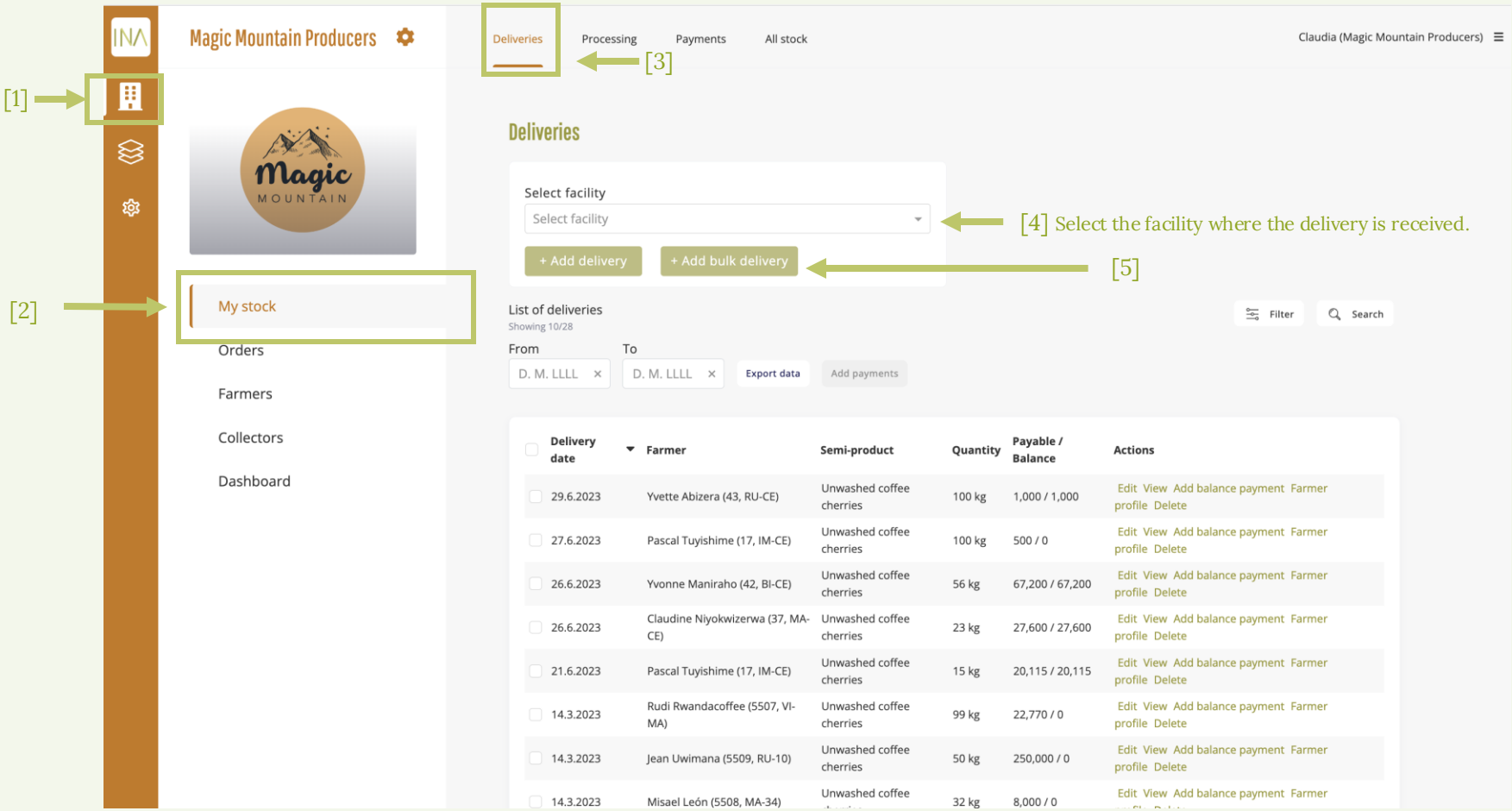


2.2 How to record bulk delivery

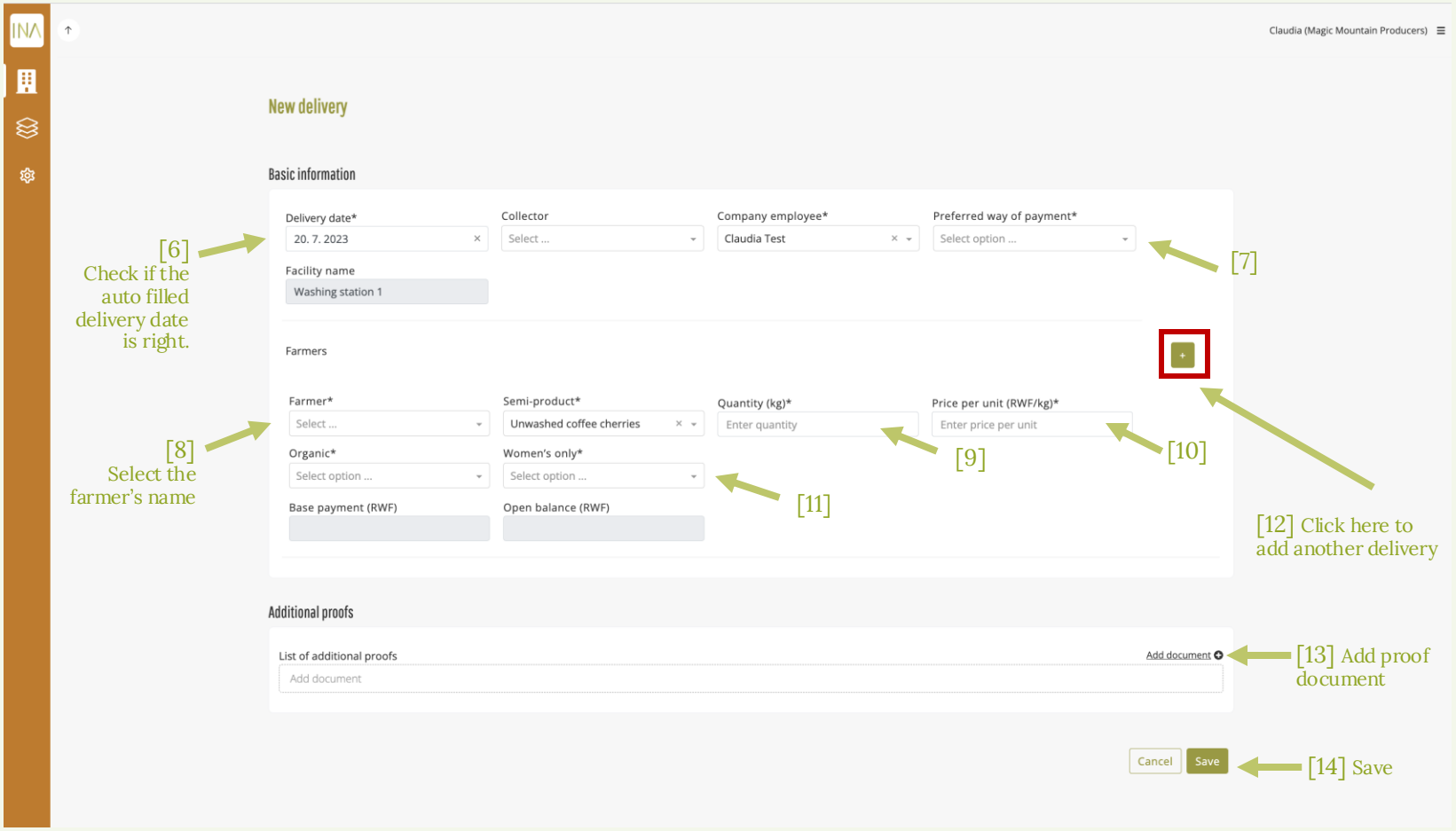
To record bulk delivery, click on the “Company” icon as shown on the screenshot below which leads you to “My Stock”. You can also go direct to “My stock” tile as shown below.



Once you are at my stock page, follow the indicated steps to add a bulk delivery.



After clicking on “Add bulk delivery” button, this page will appear, which gives you the ability to record all required information related to the deliveries of different farmers. You will be required to supply information such as delivery date, names of different farmers, quantities delivered, price per unit, farmers’ preferred way of payment, product characteristics (organic or women’s only) and the additional proof. Follow the indicated steps:



Chapter 3.

Processing Module

The processing module allows users to record all activities related to processing raw materials or semi-products as well as to document transfers from one facility to another.

General Note on recording processing actions

Each supply chain is different, **each company's configuration and user interface in INATrace are individual**. This is especially true regarding the company's facilities and processing actions.

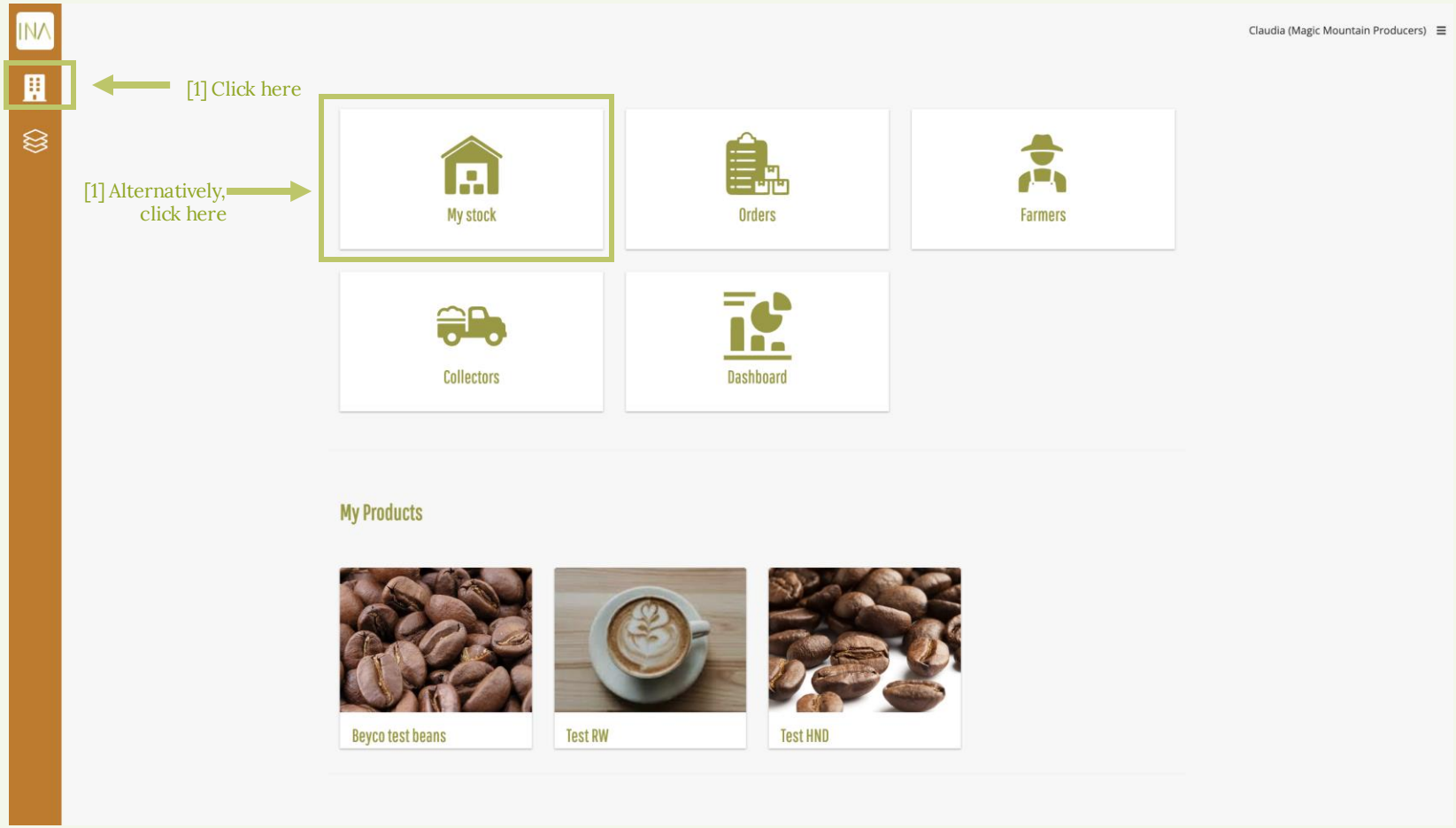
In the following, we show how to document processing actions from delivery to the company's final storage for an exemplary coffee supply chain.

KEEP IN MIND:

- **All processes need to be recorded in a chronological order** AFTER adding all deliveries which are part of the processing action.
- You will need to identify your product batch through all processing steps. The system will therefore ask you for an **internal lot number which represents the unique identifier for your batch**.
- Make sure to **select the correct output facility,** especially in case your product changes the location as part of a specific processing action. Example: The input facility for your processing action 2 needs to be the same one as your output facility of processing action 1. Otherwise you will not be able to select your batch for processing action 2.

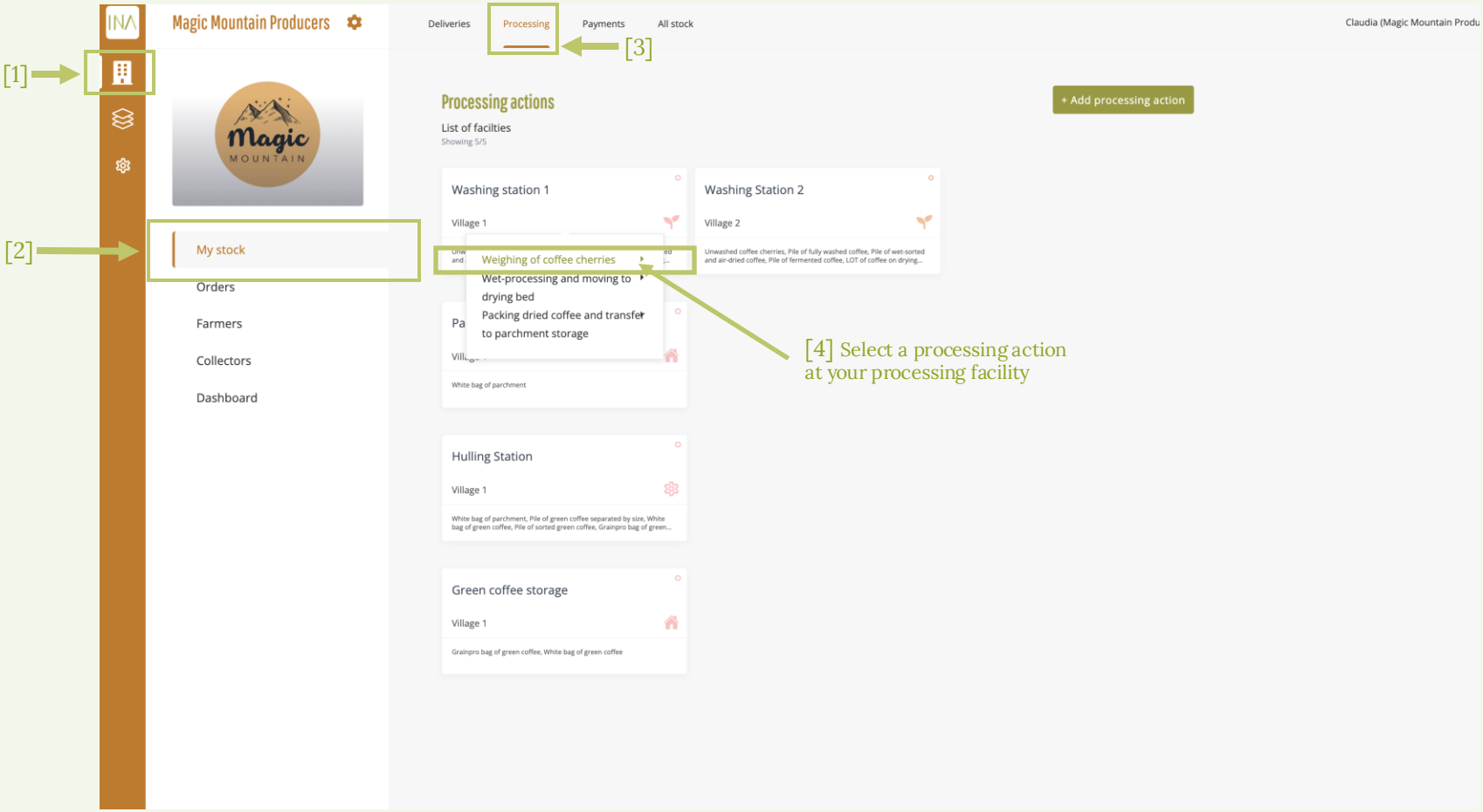
3.1 Pre-Processing

To record a processing action, click on the “Company” icon as shown on the screenshot below which leads you to “My Stock”. You can also go direct to “My stock” tile as shown below.



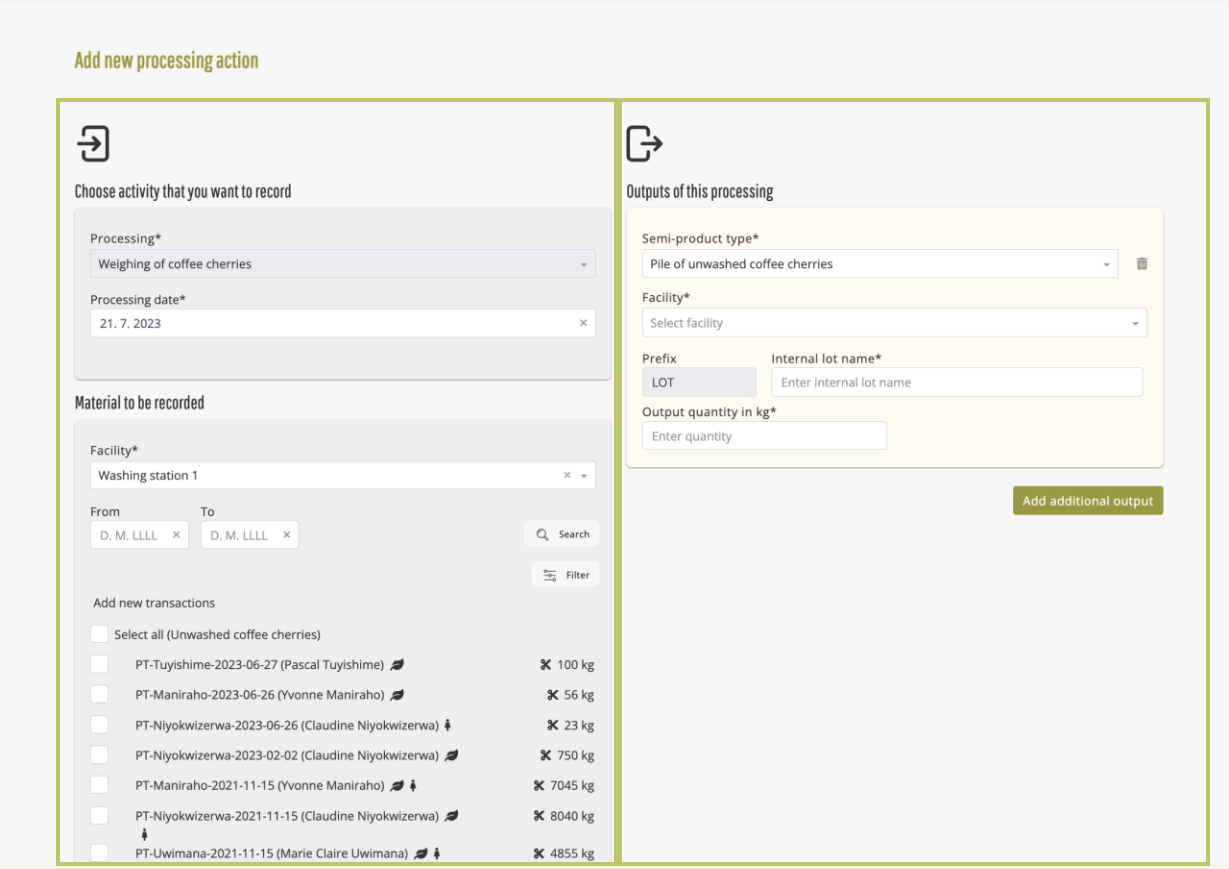
3.1.1 Weighing of delivered product

Hover over the tile of your processing facility where the processing action is done. In this example, we click on "**Weighing of coffee cherries**" to record the weighing action.



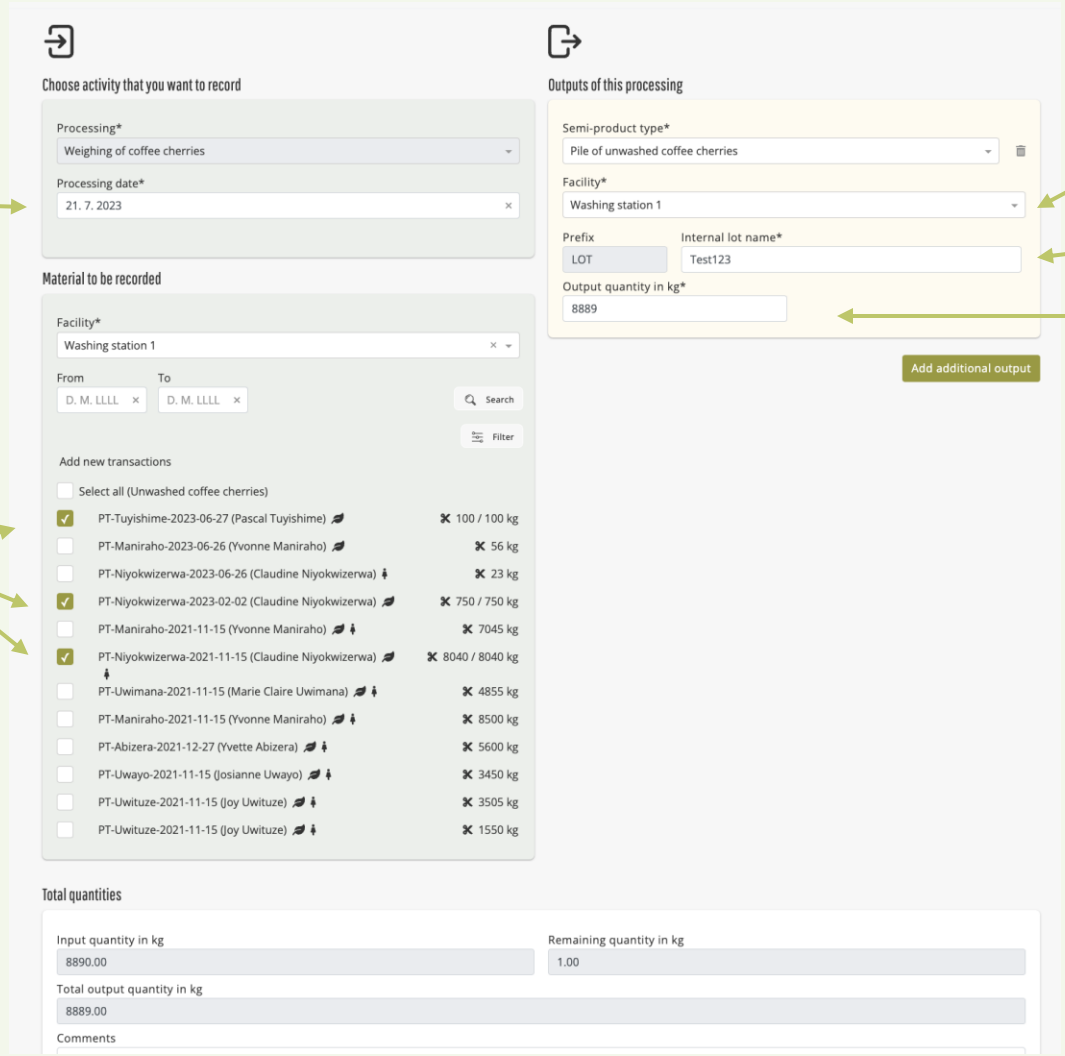
“**Add new processing action**” page appears with prefilled information in the processing and facility fields.
The page has two main parts:
“**Material to be recorded**” meaning process input information,
“**Outputs of this recording**” which means the results after processing

Process input



Process Output

Follow below steps to document the processing action, like in the below example of "**weighing of coffee cherries**"



[5] Indicate the date on which the processing action is done.

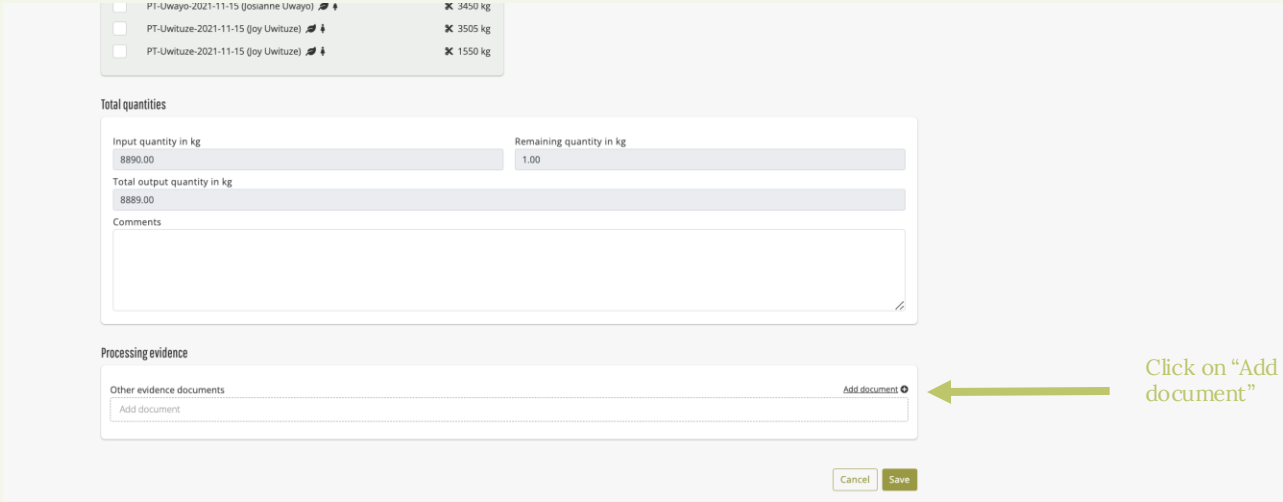
[6] Select inputs to process.

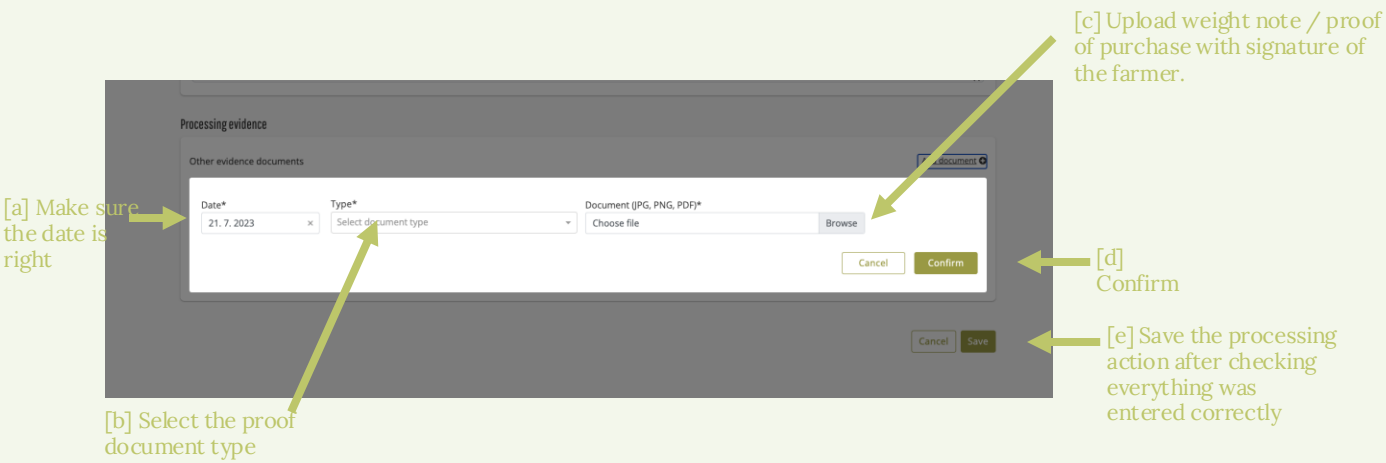
[7] Select the facility where the product is located at the end of this processing action

[8] Type in a unique code to identify the batch in the system.

[9] Type in the cumulative output quantity gotten after finishing this process

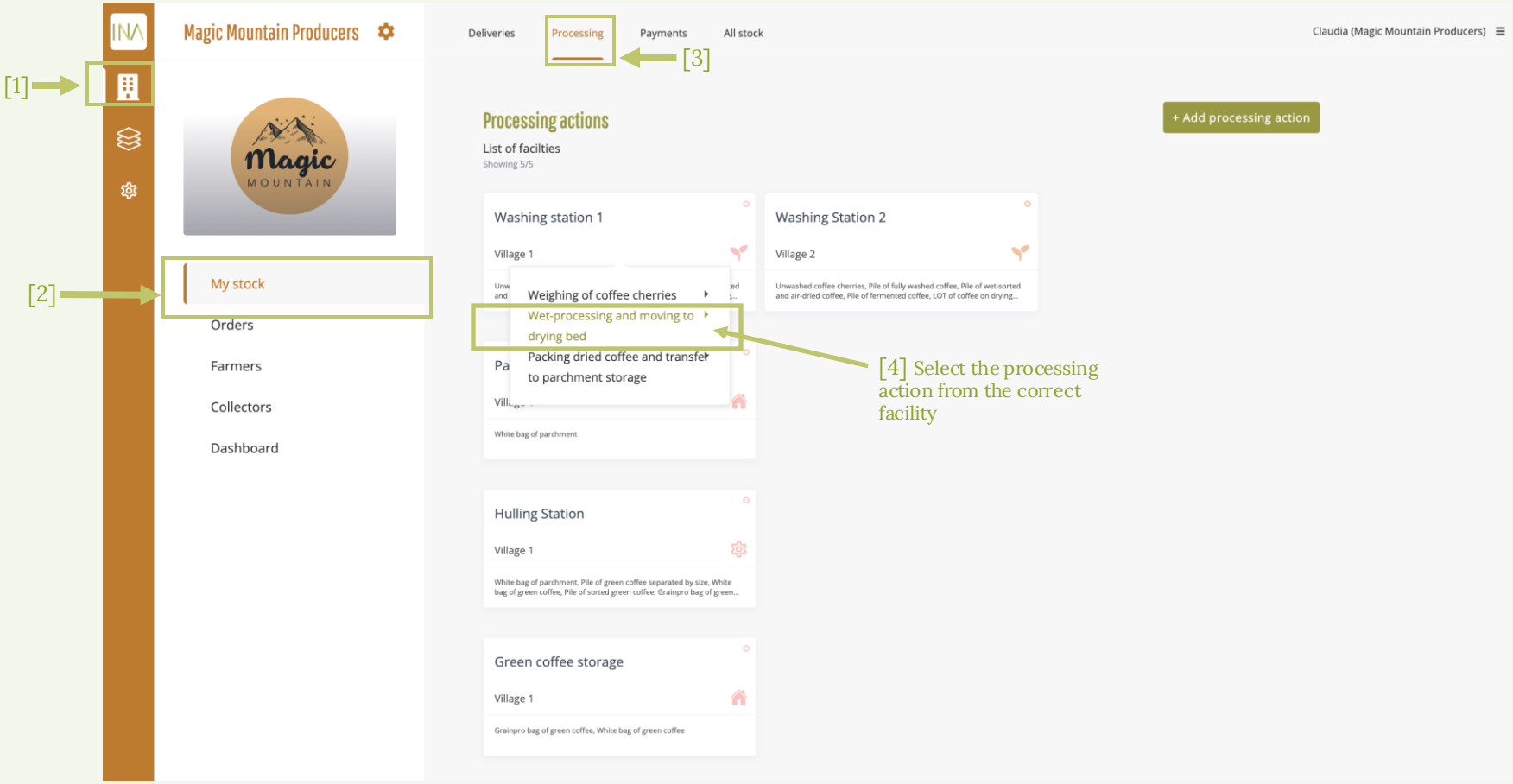
Here are steps of "**Adding a proof document**" and saving the processing action.





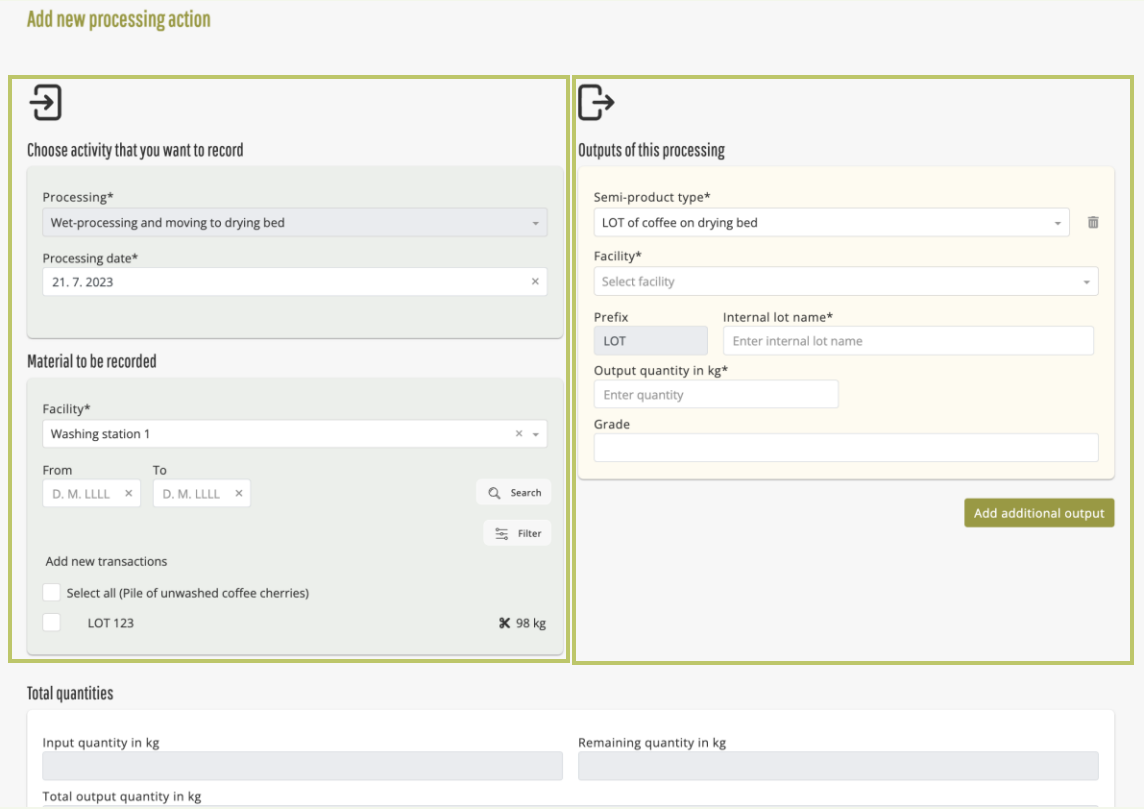
3.1.2 Pre-processing (e.g. wet-processing and moving to drying bed)

Hover on the tile of the facility where the pre-processing action is to be done. In our example, we click on "**Wet-processing and moving to drying bed"** to start recording the process.



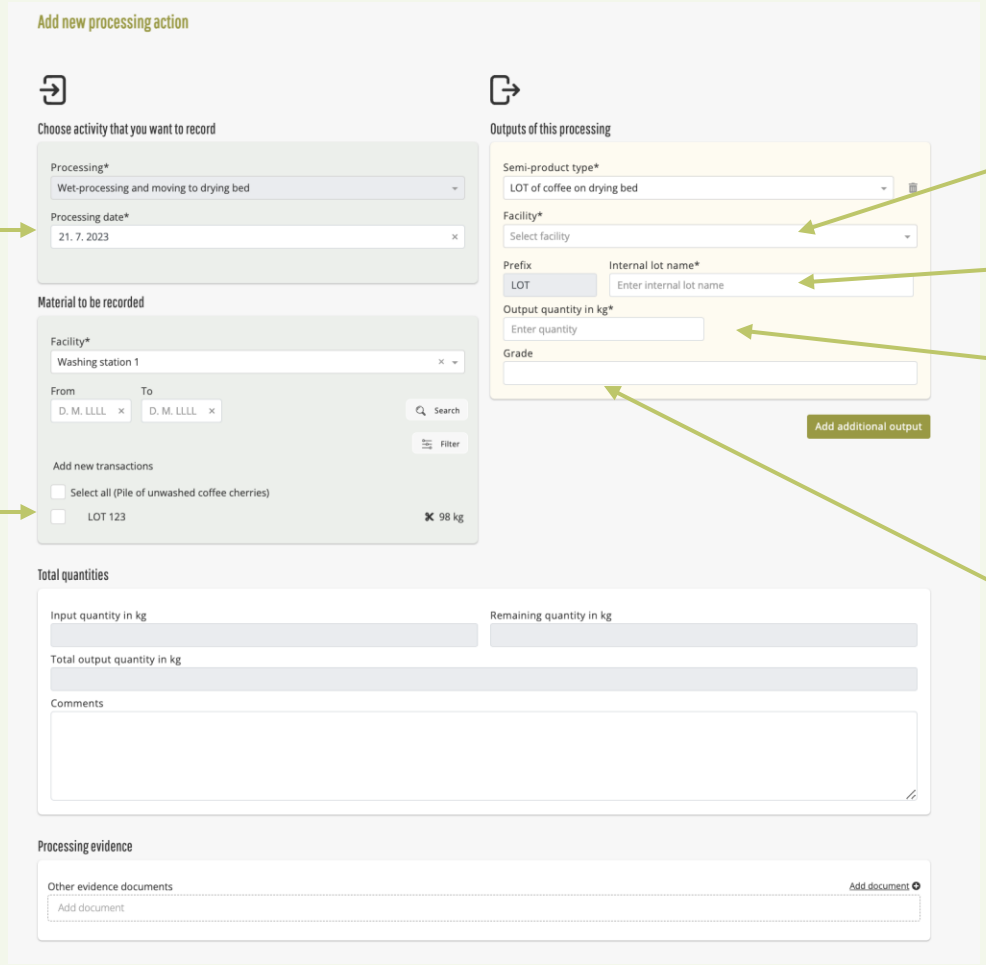
“**Add new processing action**” page appears with prefilled information in the processing and facility fields.
The page has two main parts:
“**Material to be recorded**” meaning process input information,
“**Outputs of this recording**” which means the results after processing

Process input



Process Output

Follow below steps to document your **pre-processing action.**



[5] Indicate the date on which the processing action is done.

[6] Select the inputs to process.

[7] Select the facility where the batch is located at the end of this process.

[8] Type in a unique code to identify lot in the system.

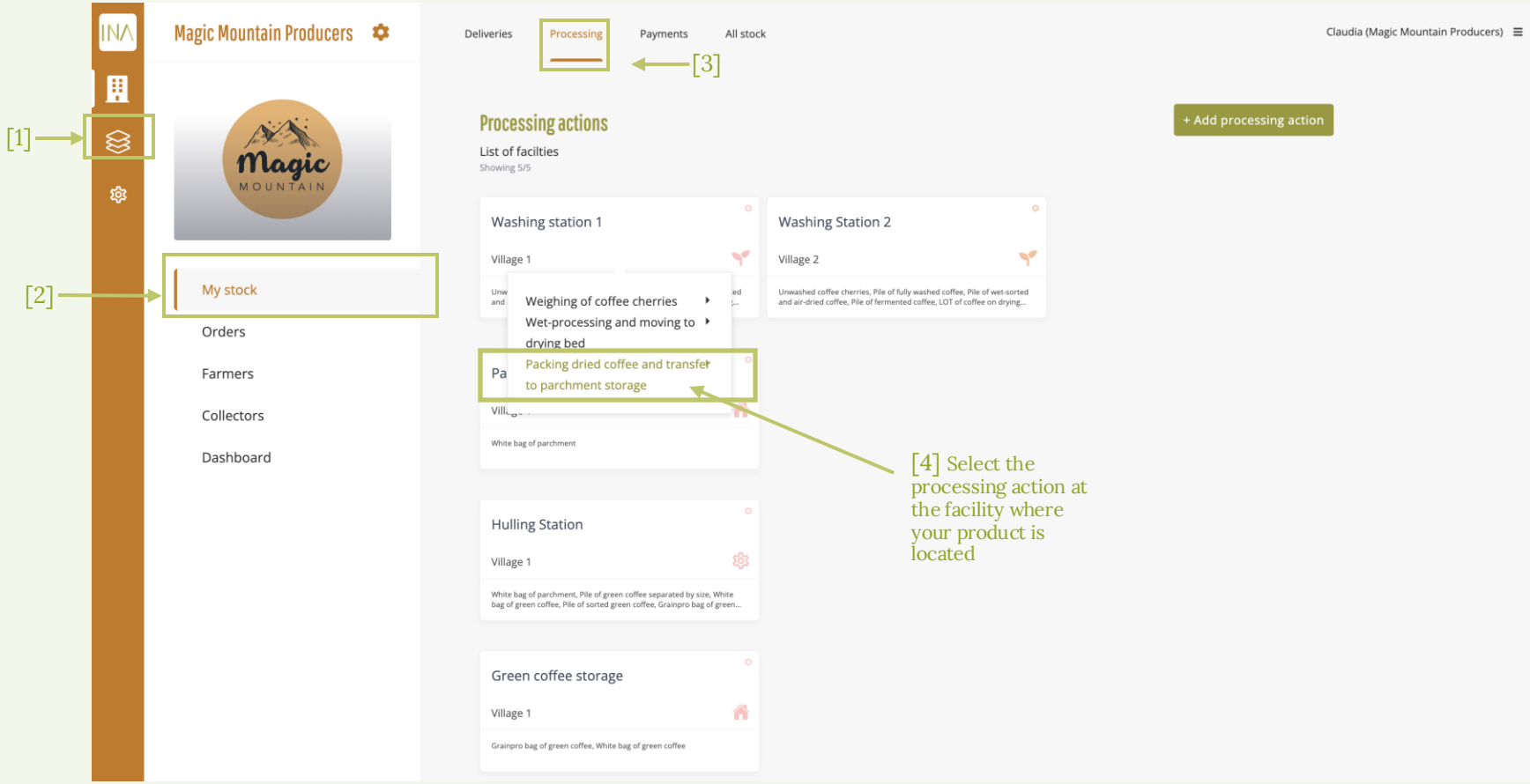
[9] Type in cumulative output quantity gotten after processing.

[10] Complete additional information (e.g. grade) depending on your company settings.

[11] Add proof documents if needed and click “Save”

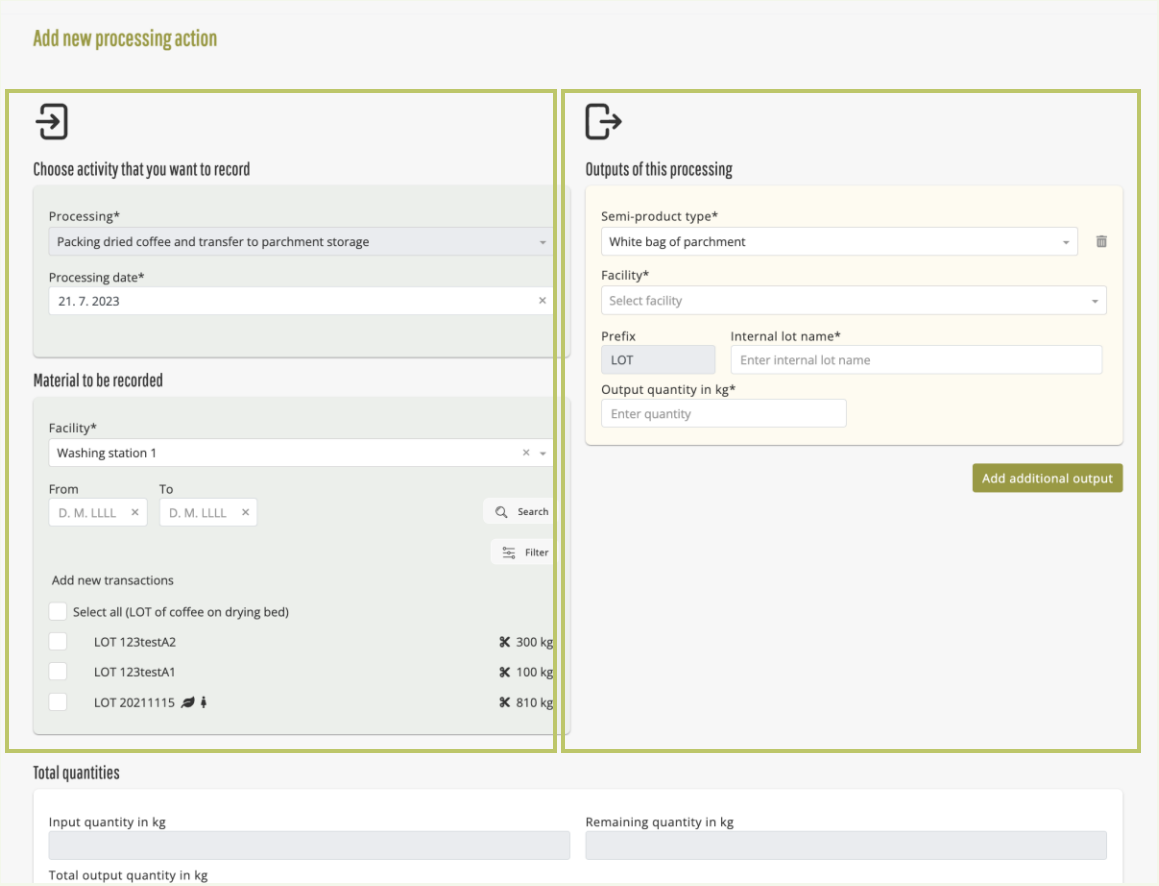
3.1.3 Packing dried product and transfer to storage

Hover on the tile of the facility where the processing action is to be done and select the transaction, In our example, we click on "**Packing dried coffee and transfer to parchment storage**" to record the transaction.



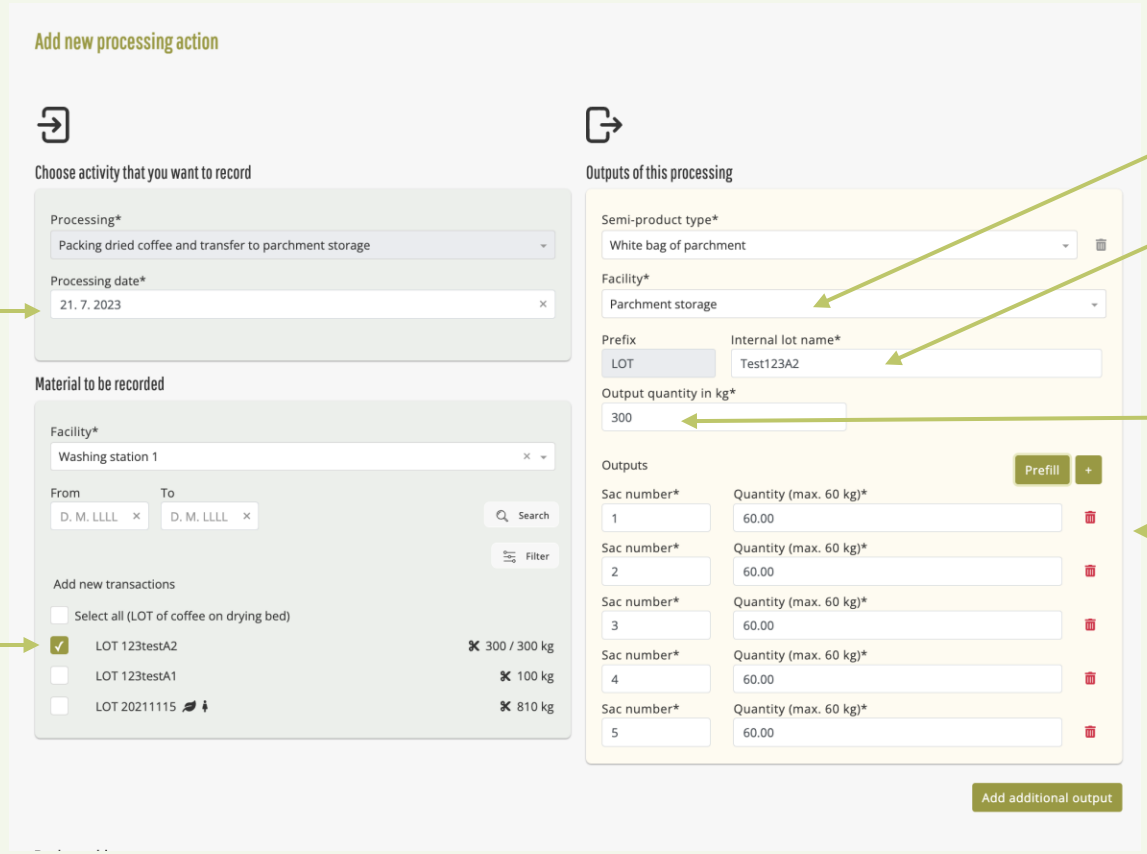
"**Add new processing action**" page appears with prefilled information in the processing and facility fields.
The page has two main parts:
"**Material to be recorded**" meaning process input information,
"**Outputs of this recording**" which means the results after processing

Process input



Process output

Follow below steps to document **Packing dried product and transfer to storage**.



[5] Indicate the date on which the action is done.

[6] Select the batches to package and transfer.

[7] Select your storage facility.

[8] Type in a unique code to identify lot in the system.

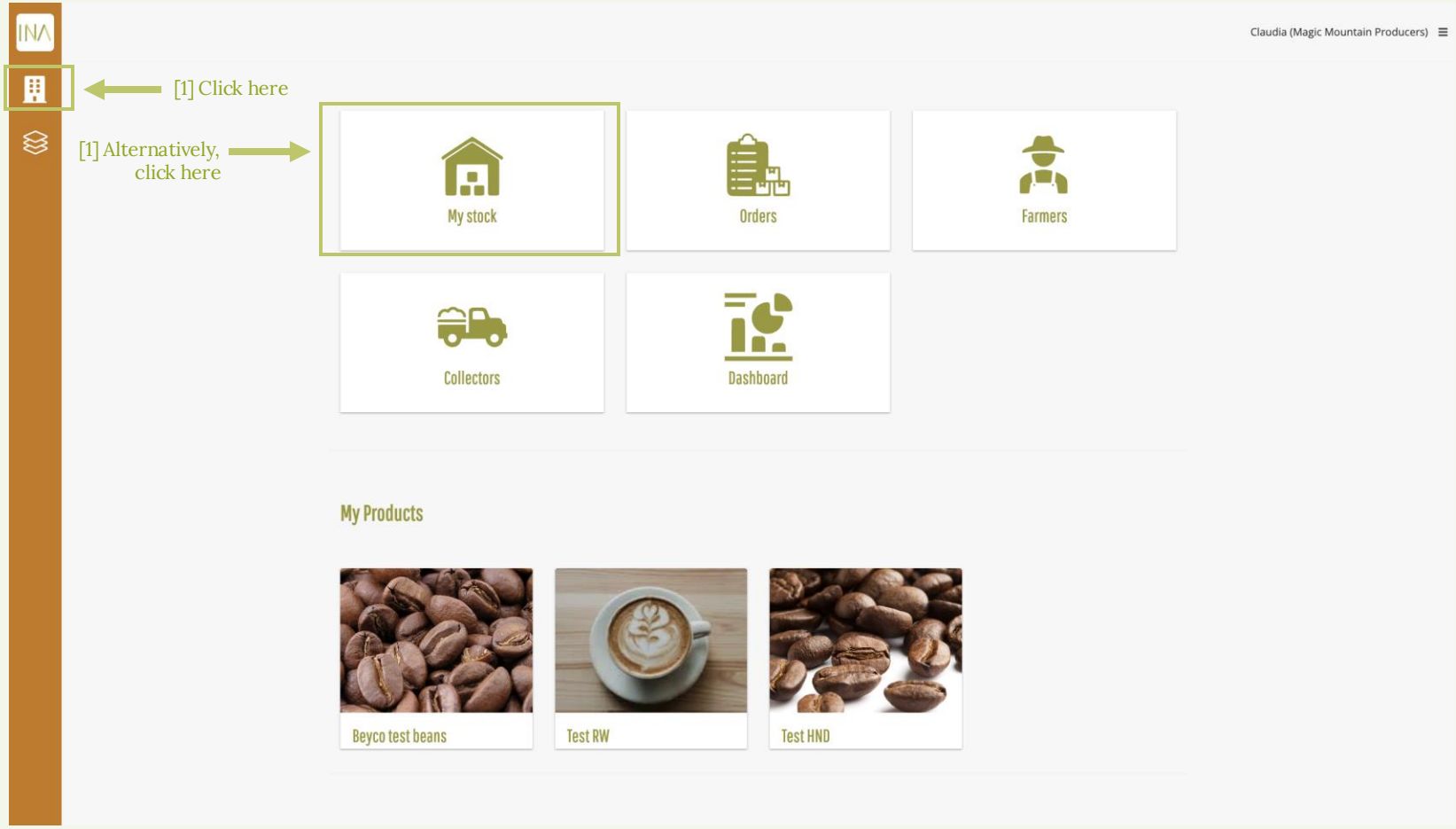
[9] Type in cumulative quantity gotten at the end of this process.

[10] For all processing actions which include repackaging, the weight for each unit (e.g. sac) has to be defined. By clicking on "Prefill", the system allocates the maximum quantity to each unit

[11] Add proof documents if needed and click "Save"

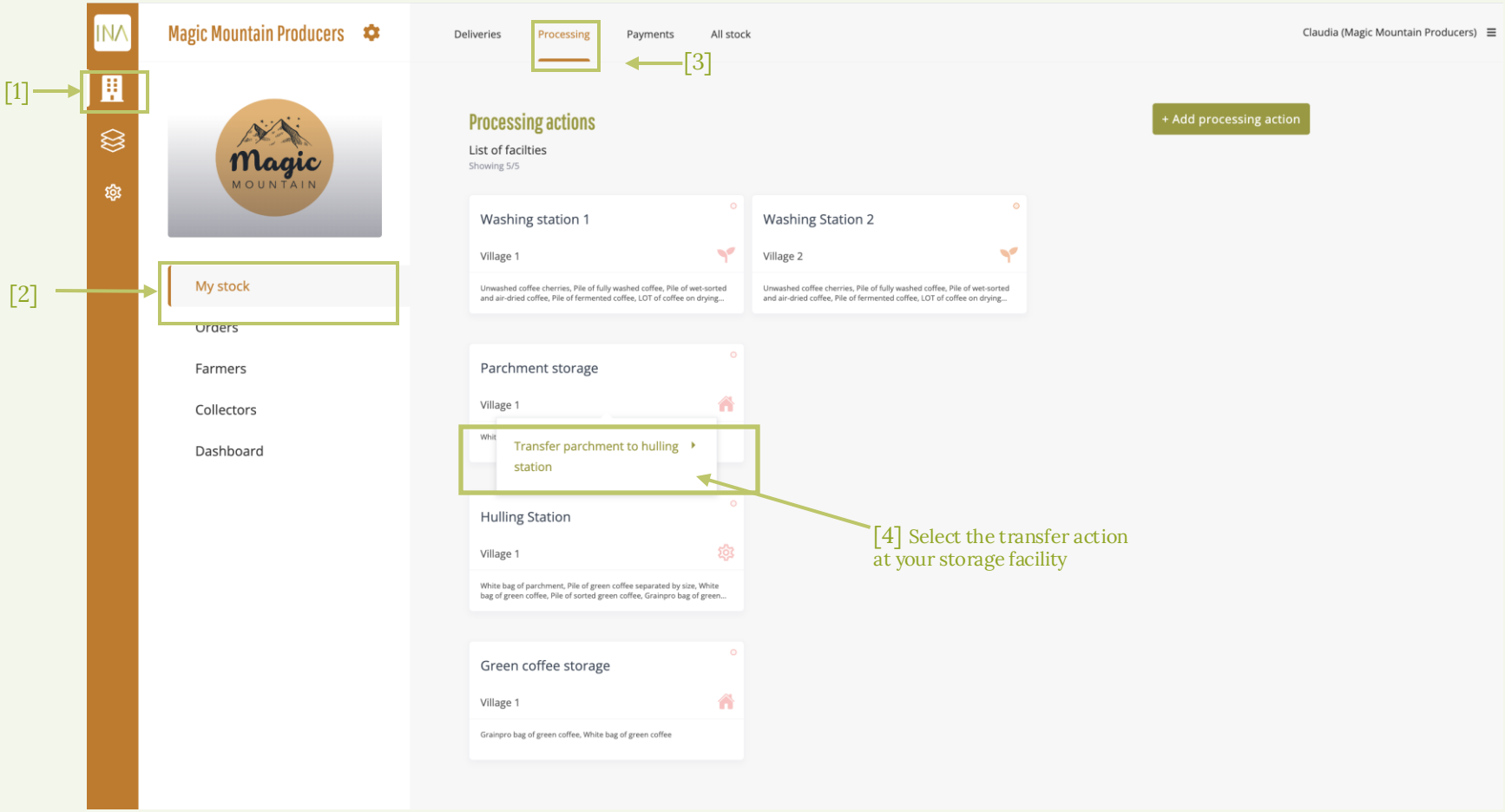
3.2 Storage facility

To record transaction at the storage facility, click on the “Company” icon as shown on the screenshot below which leads you to “My Stock”. You can also go direct to “My stock” tile as shown below.



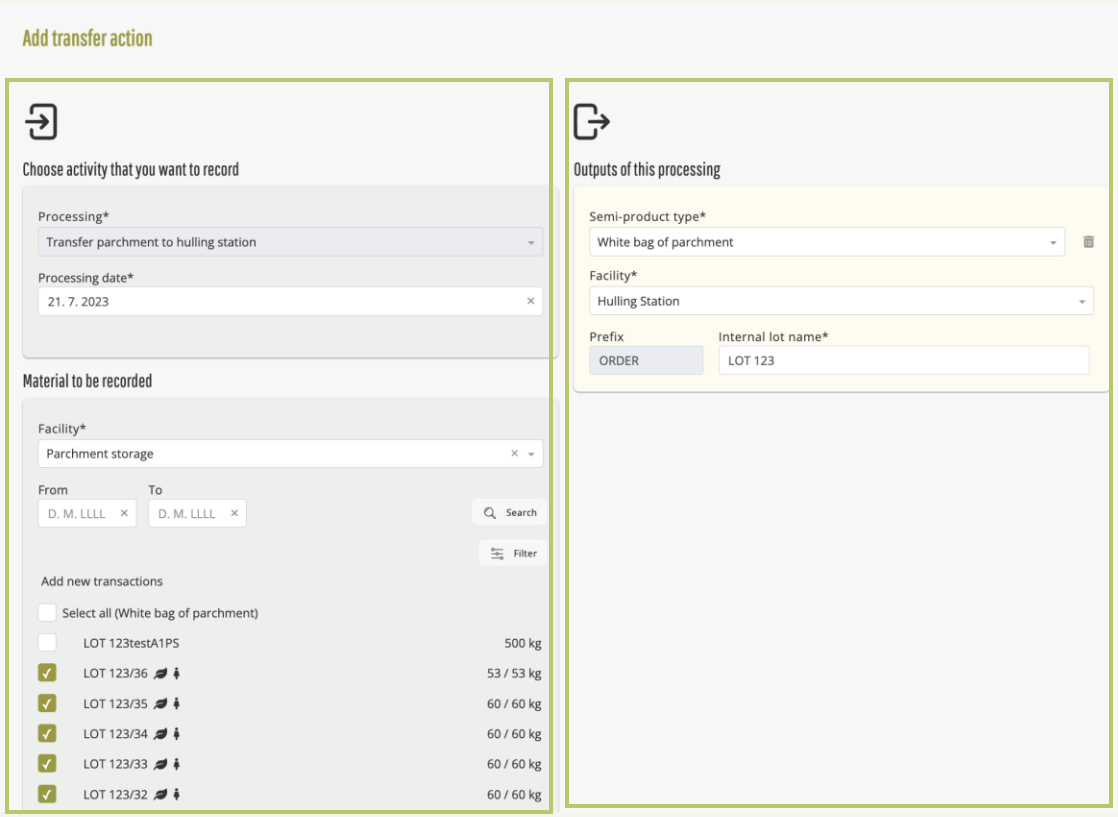
3.2.1 Transfer from storage to processing facility

Hover on the tile of the storage where the processing action is to be done. In this example, we click on "**Transfer parchment to hulling station**" to move the coffee to the hulling station.



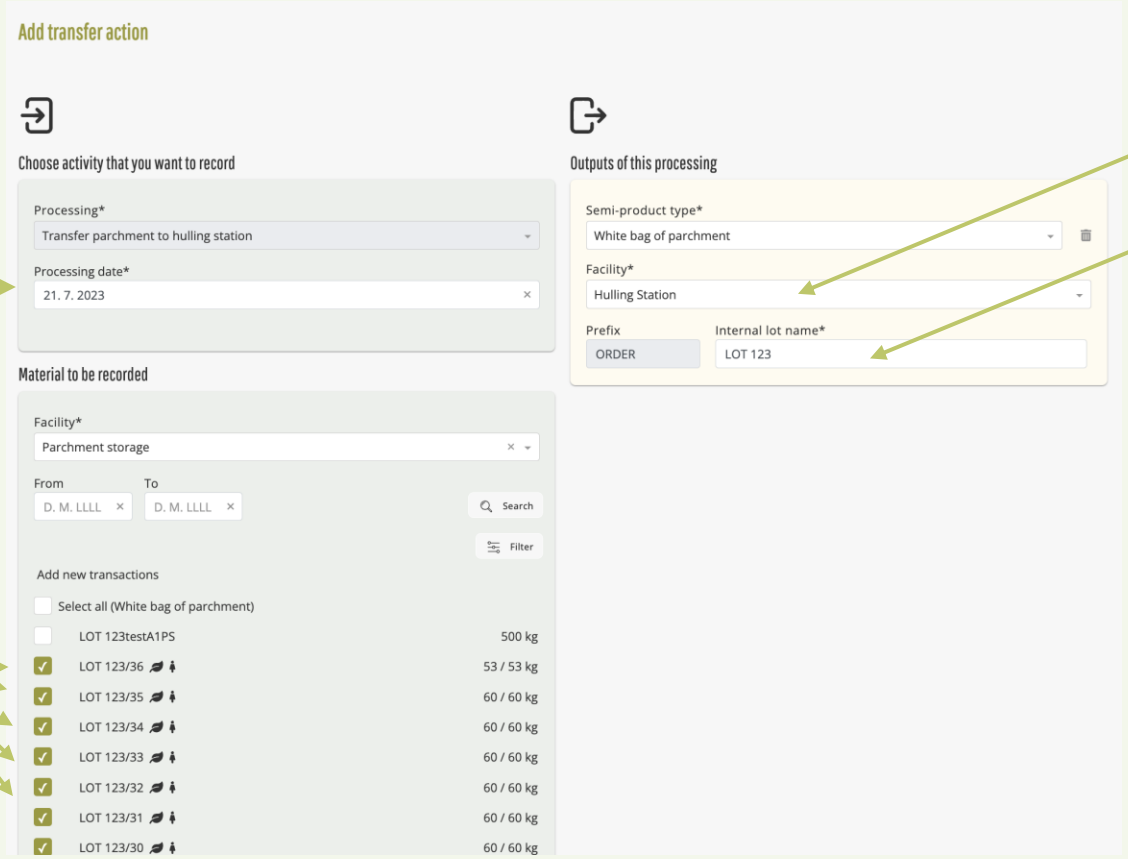
“**Add transfer action**” page appears with prefilled information in the processing and facility fields.
The page has two main parts:
“**Material to be recorded**” meaning process input information,
“**Outputs of this recording**” which means the results after processing

Process input



Process output

Follow below steps to document **Transfer from storage to processing facility**.



[5] Indicate the date on which the transfer is done.

[6] Select the items to package and move.

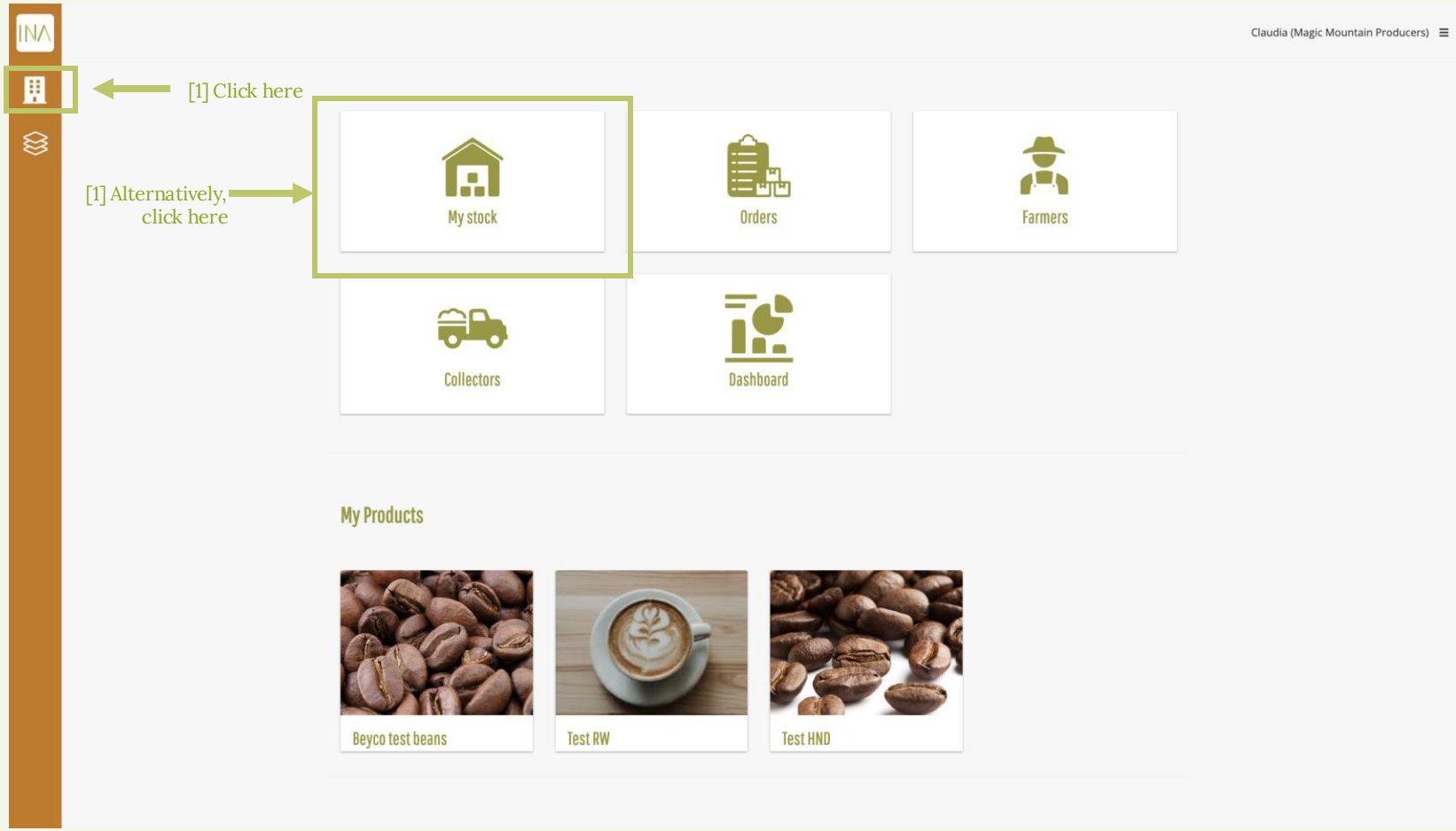
[7] Select your processing facility where your batch is transported to.

[8] Type in a unique code to identify lot in the system.

[9] Click "Save" on the bottom of the page

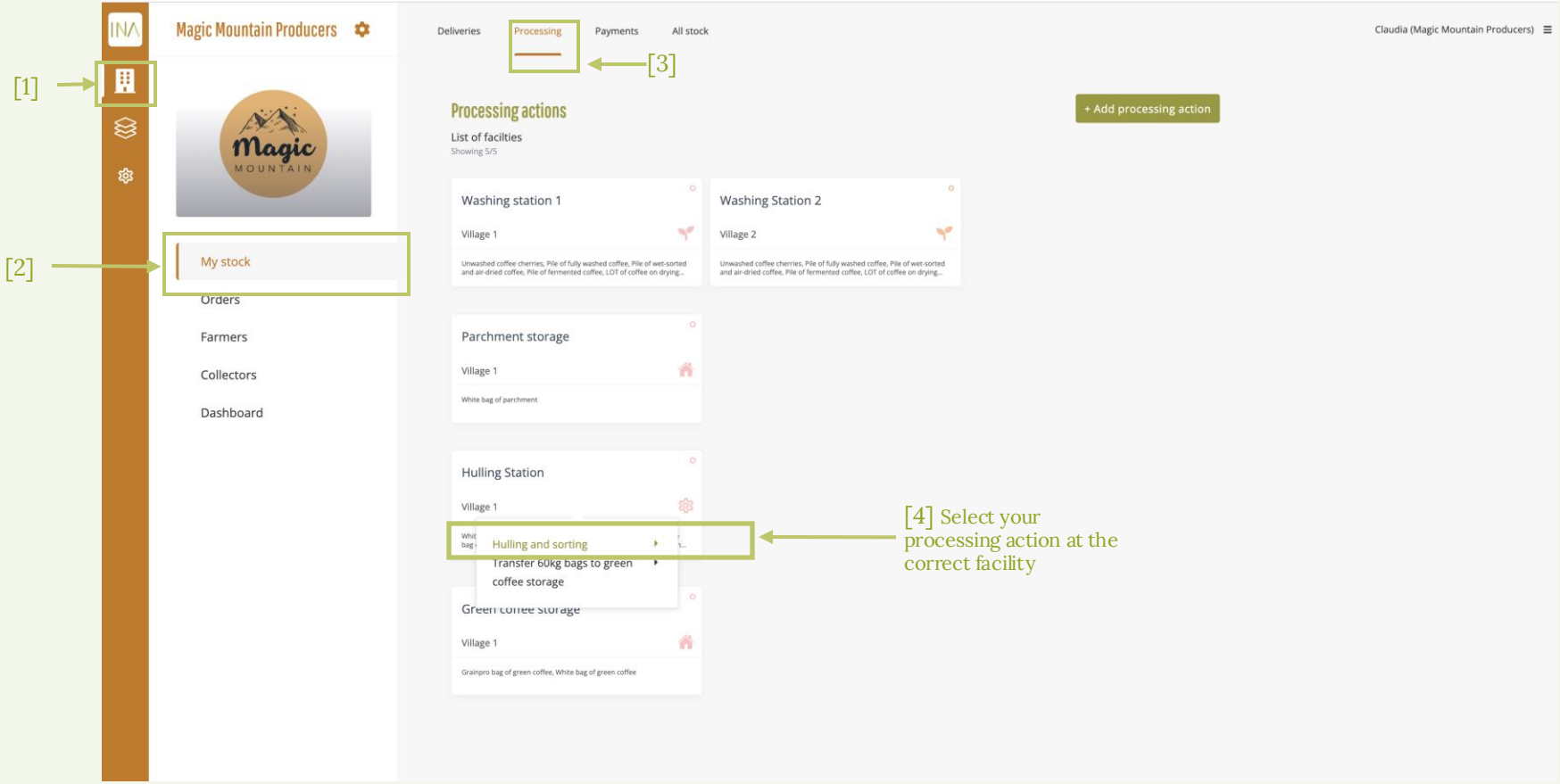
3.3 Processing

To record a processing action from your processing facility, click on the “Company” icon as shown on the screenshot below which leads you to “My Stock”. You can also go direct to “My stock” tile as shown below.



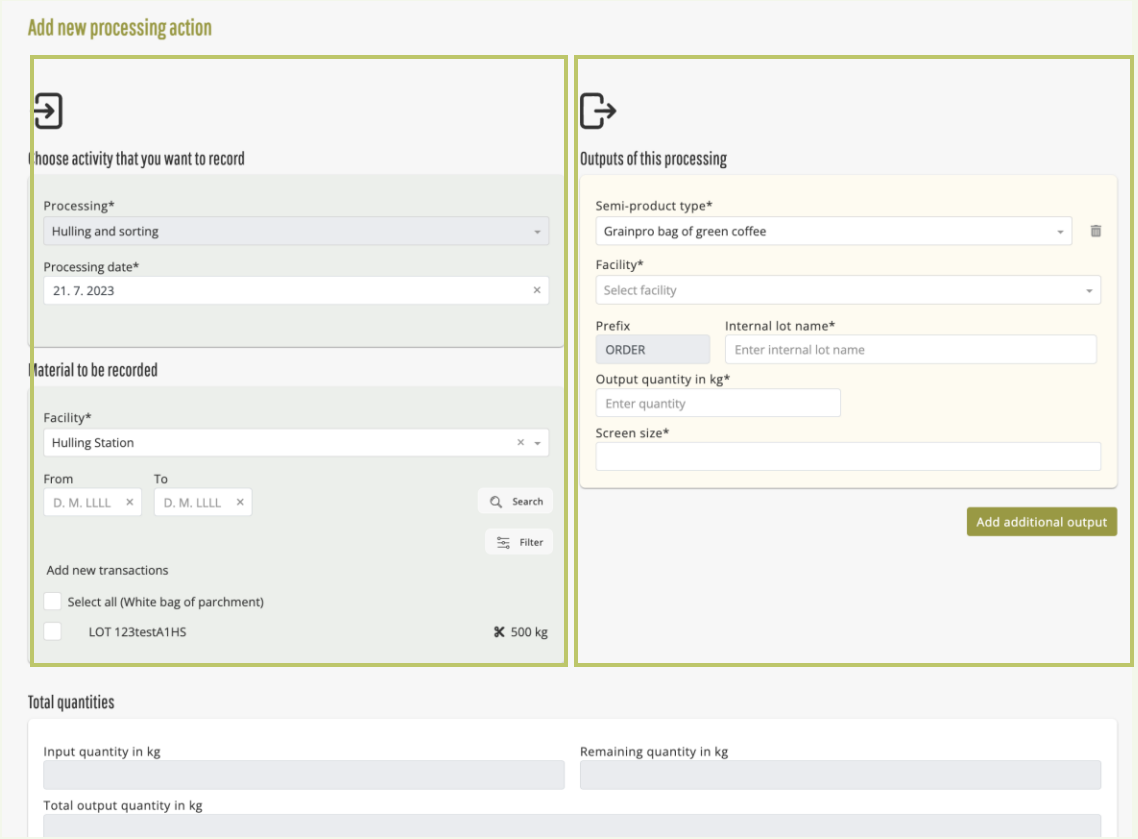
3.3.1 Processing example: hulling of coffee

Hover on the tile of the facility where the processing action is to be done. In our example, we click on "**hulling and sorting**".



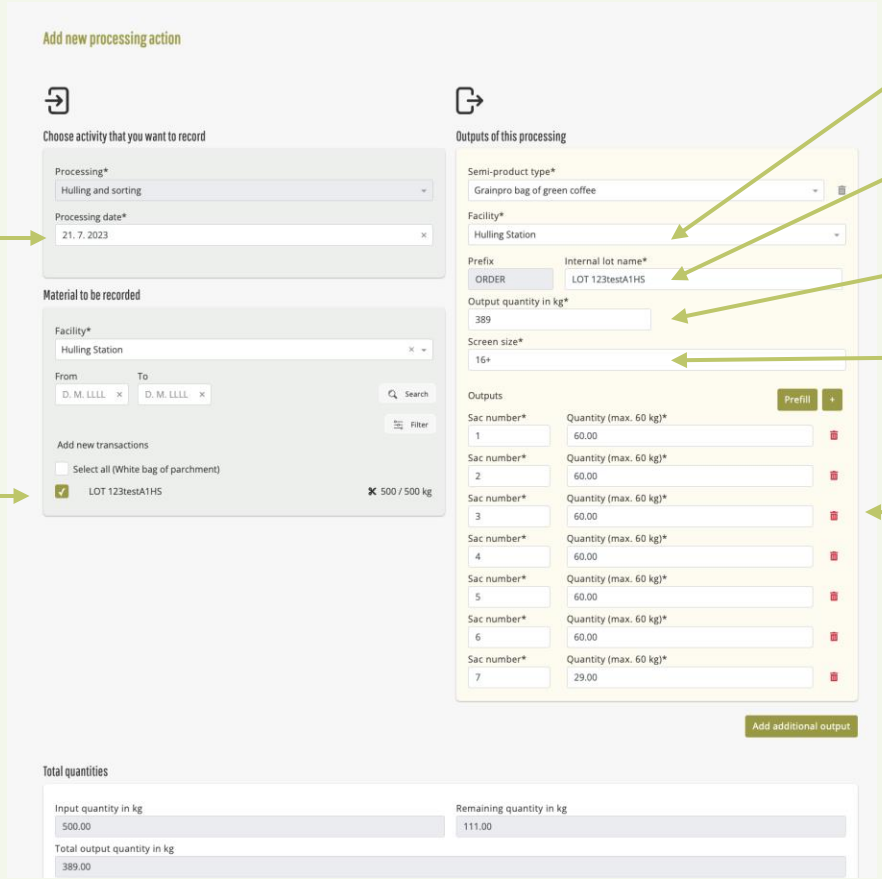
"**Add new processing action**" page appears with prefilled information in the processing and facility fields.
The page has two main parts:
"**Material to be recorded**" meaning process input information,
"**Outputs of this recording**" which means the results after processing

Process input



Process output

Follow below steps to document your **processing action**.



[5] Indicate the date on which the hulling action is done.

[6] Select the input to process. Clip your input with the scissors icon in case you do not process the entire input quantity

[7] Select your processing facility (e.g. hulling station) where this process ENDS.

[8] Type in a unique code to identify lot in the system.

[9] Type in cumulative quantity gotten at the end of this process.

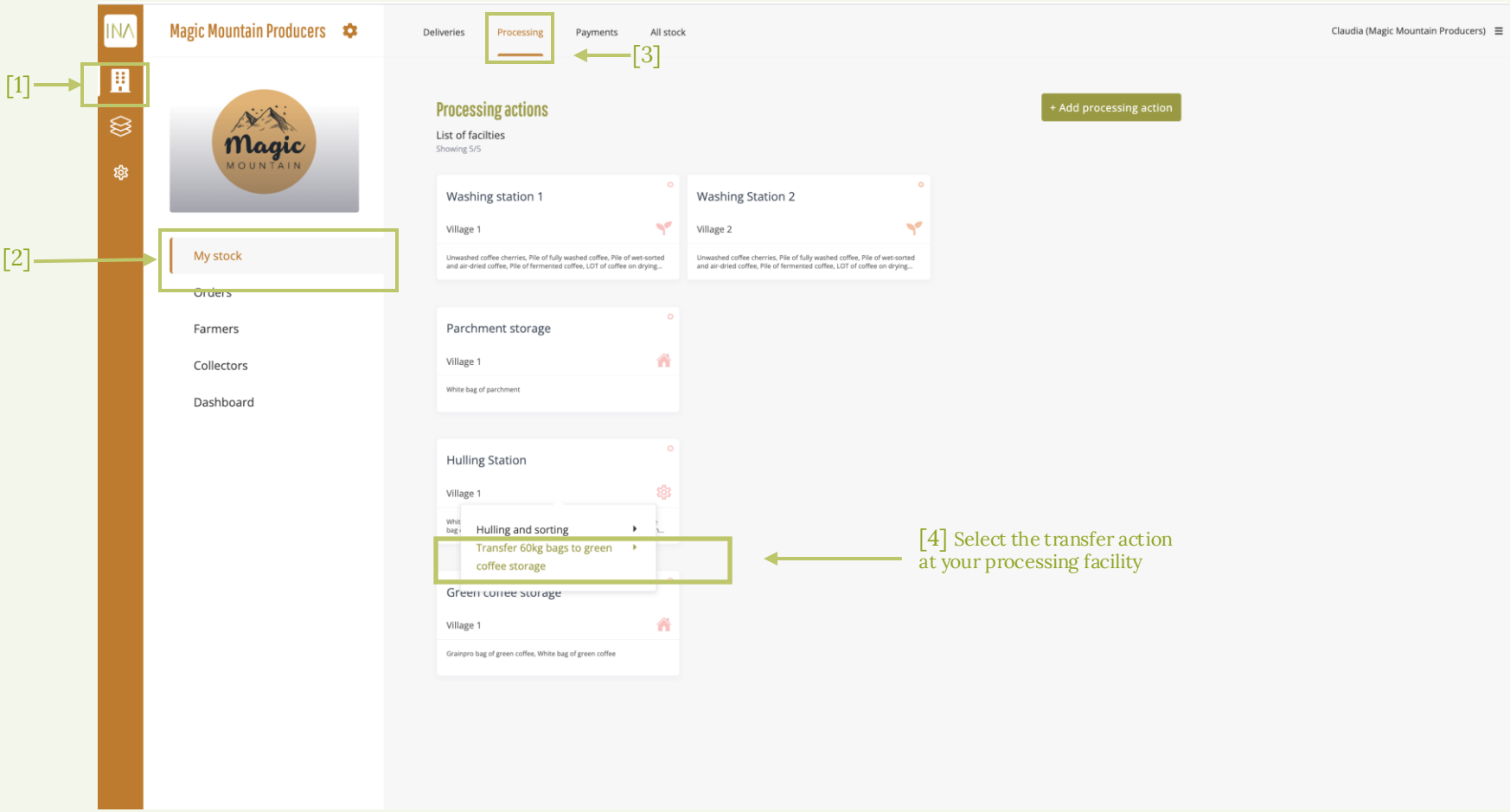
[10] Complete additional information (e.g. grade) depending on your company settings.

[11] For all processing actions which include repackaging, the quantity for each unit (e.g. sac) has to be defined. By clicking on "Prefill", the system allocates the maximum quantity to each unit

[12] Add proof document and save

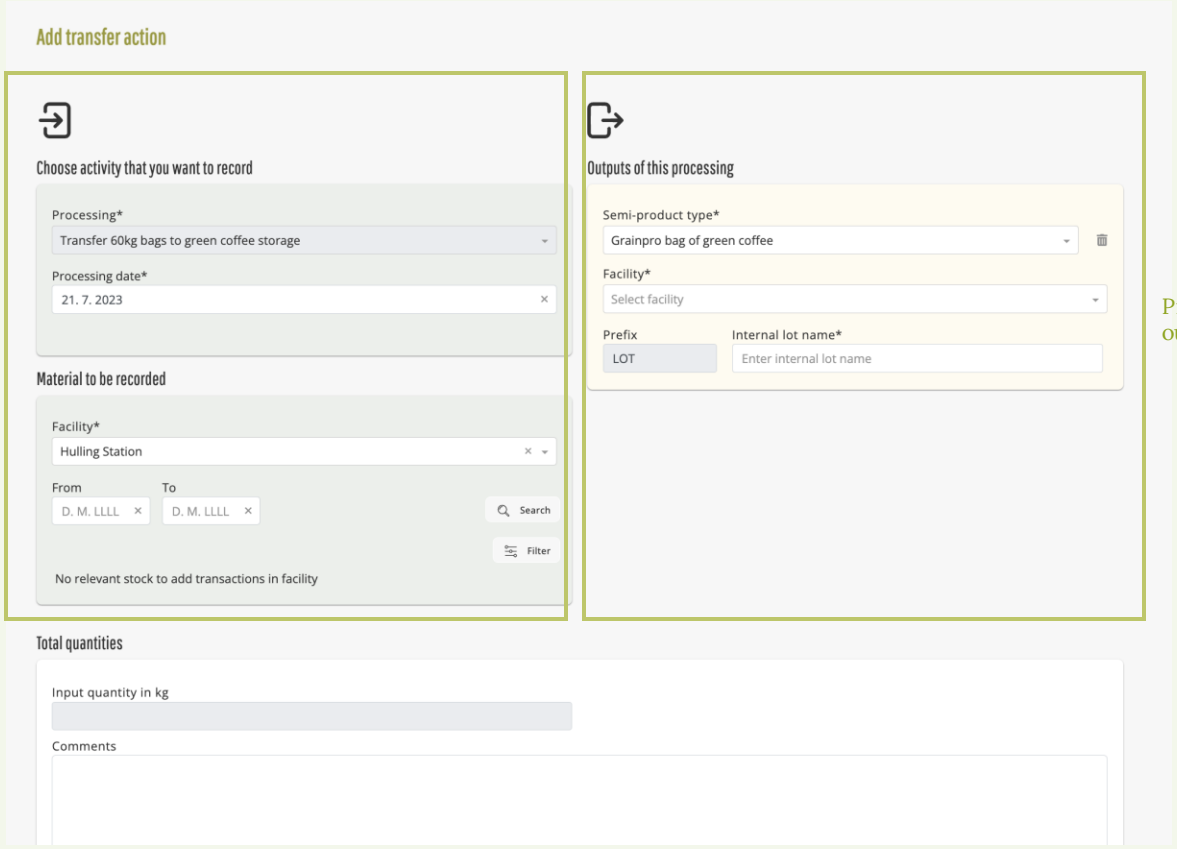
3.3.2 Post-process example: Transfer to company's final storage

Hover on the tile of the facility where the processing action is to be done. In our example, we click on "**Transfer GrainPro bags to green coffee storage"** to open the add action page and document the transfer information.



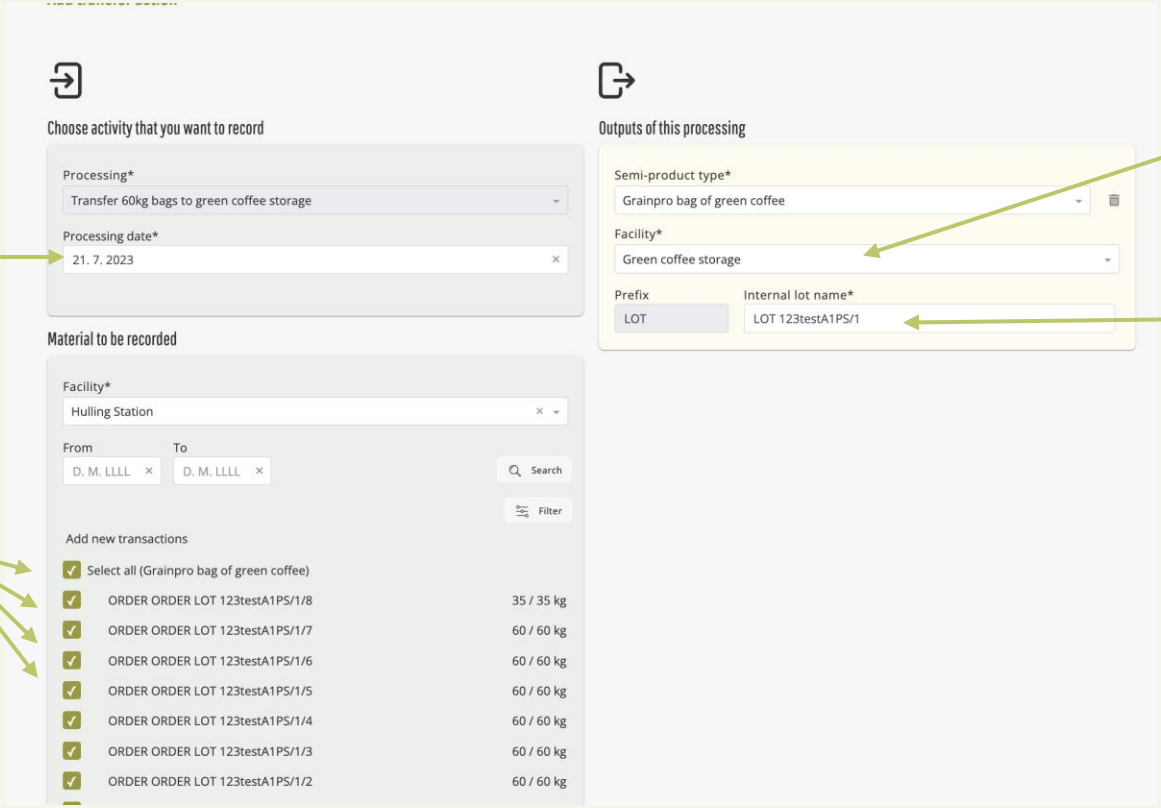
“**Add transfer action**” page appears with prefilled information in the processing and facility fields.
The page has two main parts:
“**Material to be recorded**” meaning process input information,
“**Outputs of this recording**” which means the results after processing

Process input



Process output

Follow below steps to document **Transfer to company's final storage**.



[5] Indicate the date on which the transfer is done.

[6] Select the items to process.

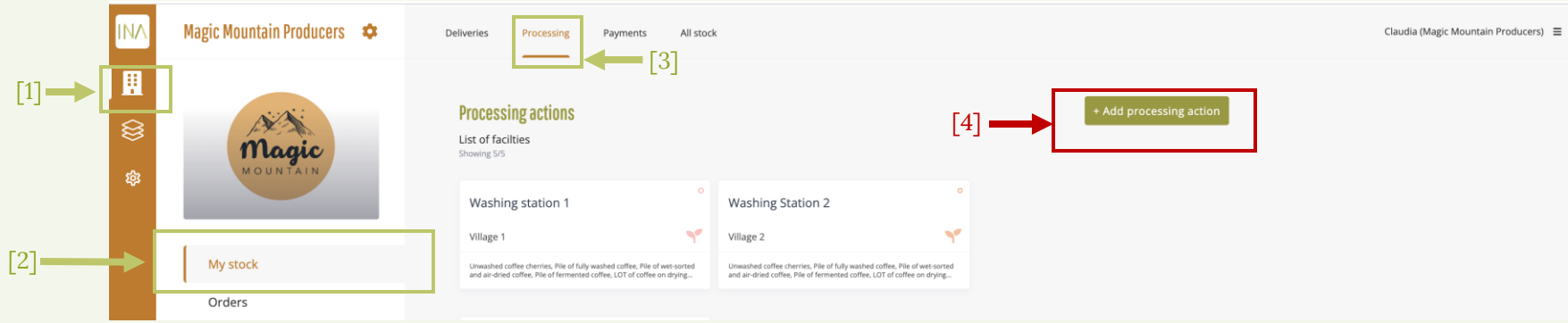
[7] Select your storage facility.

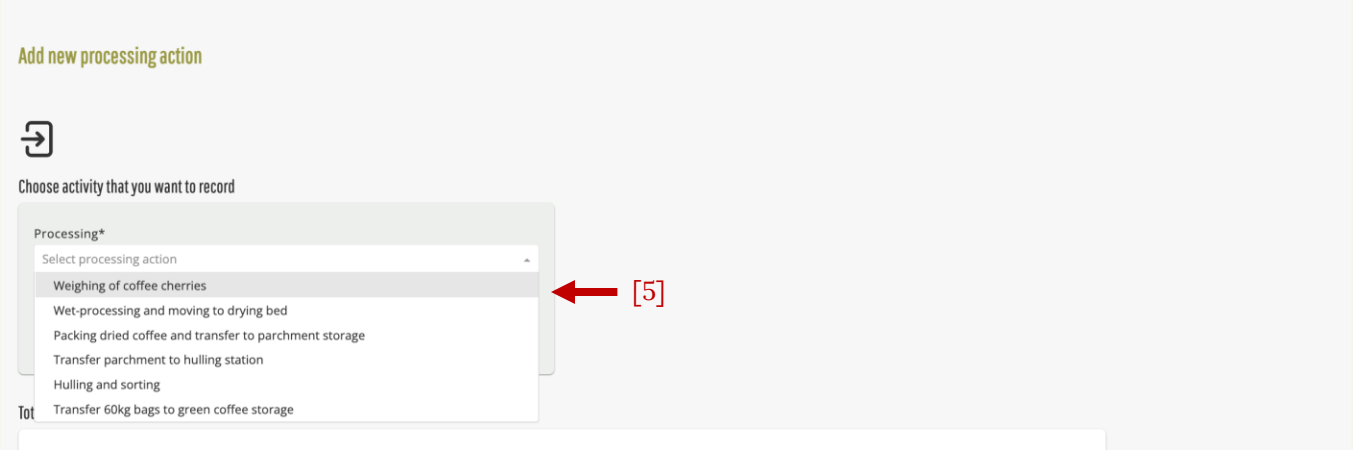
[8] Type in a unique code to identify lot in the system.

[9]Click "Save" on the bottom of the page

Using “Add processing action” button

You can alternatively access the processing interface by clicking on the “Add processing action” button. Then, choose a processing or transfer action and continue the documentation accordingly as shown in the previous steps.





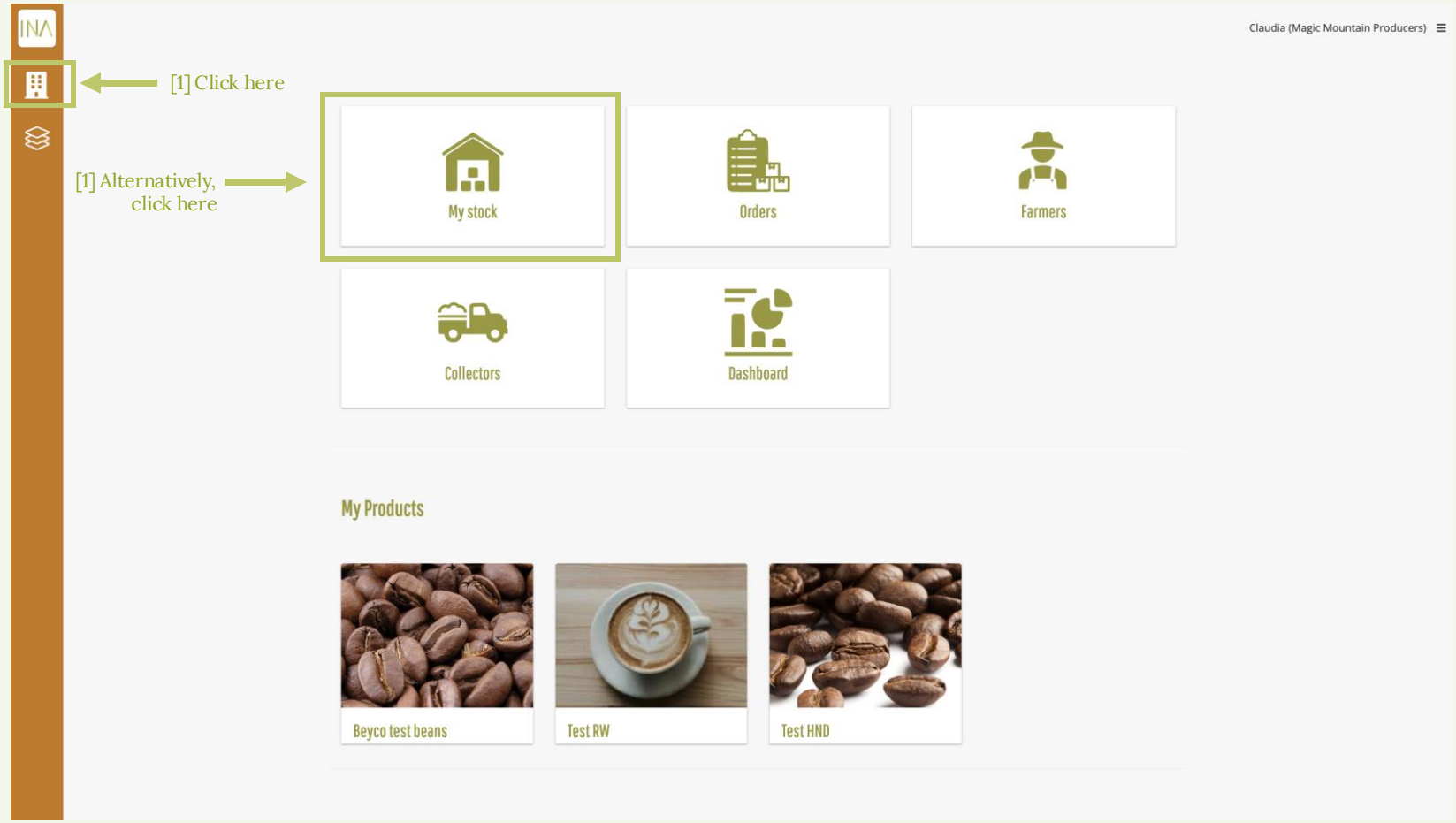
Chapter 4.

Payment Module

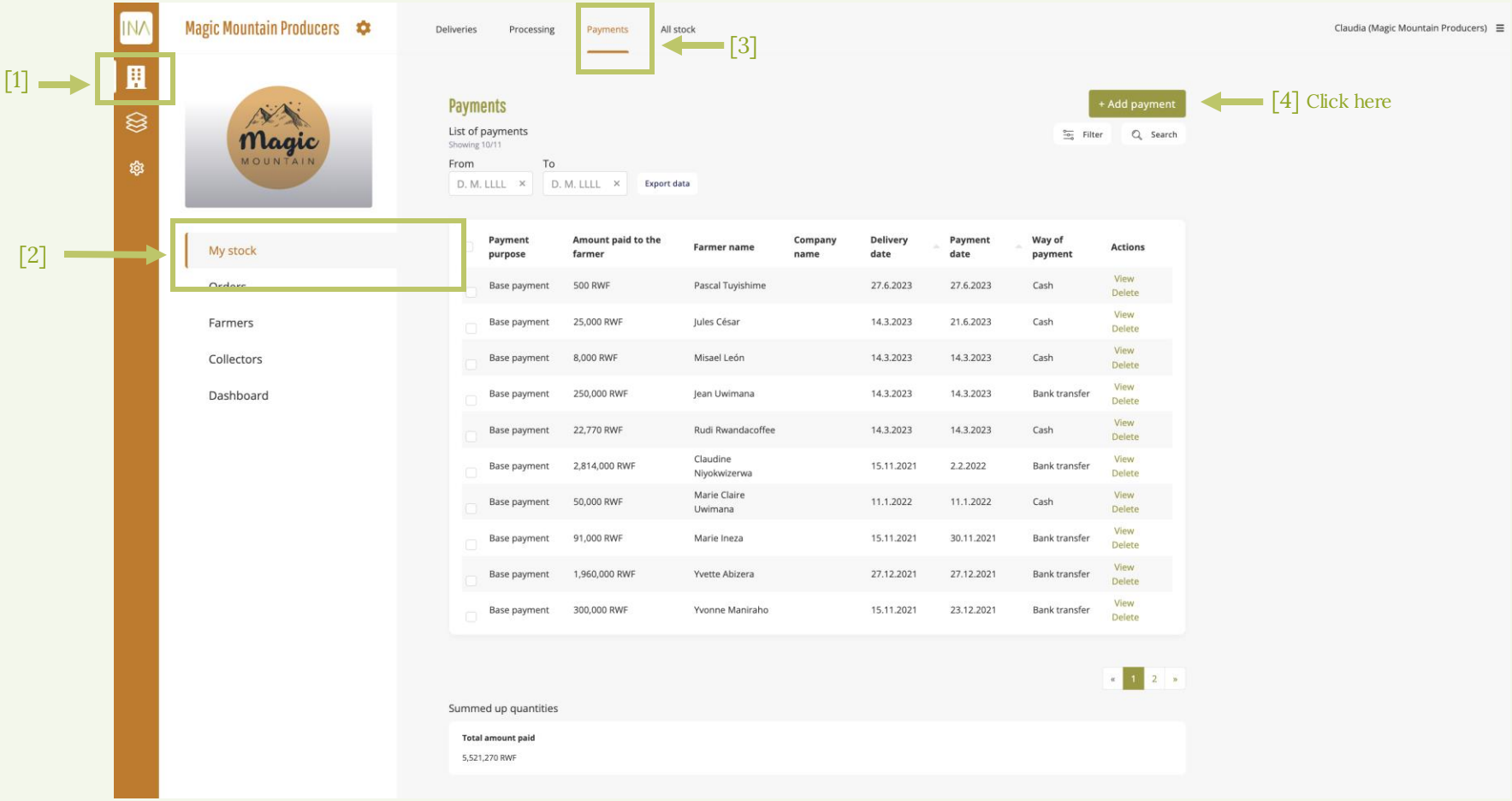
This module helps system users to perform actions related to payment of farmers. The system gives you options to either record a single payment or bulk payments.

4.1 Recording a single payment

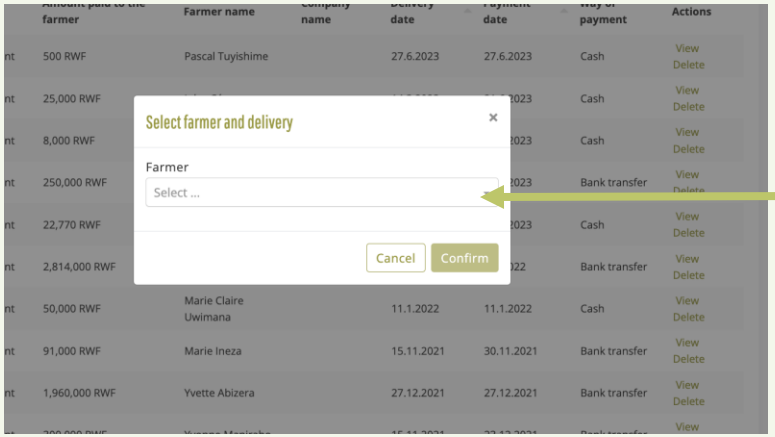
To record a single payment, click on the “Company” icon as shown on the screenshot below which leads you to “My Stock”. You can also go direct to “My stock” tile as shown below.



Inside my stock page, go to “Payments” then click on the “Add payments” button.

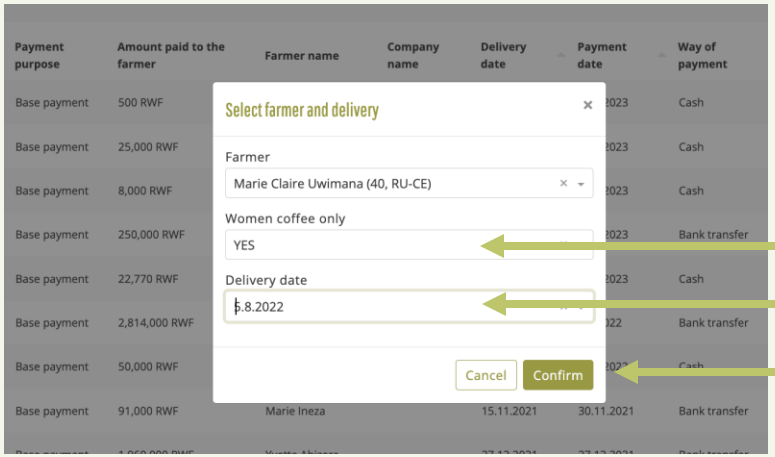


You will then be prompted with the dialog box where you can select a farmer to whom the payment was made.



[5] Select a farmer's name

Specify whether the delivery was a woman's only, select delivery date and then confirm.

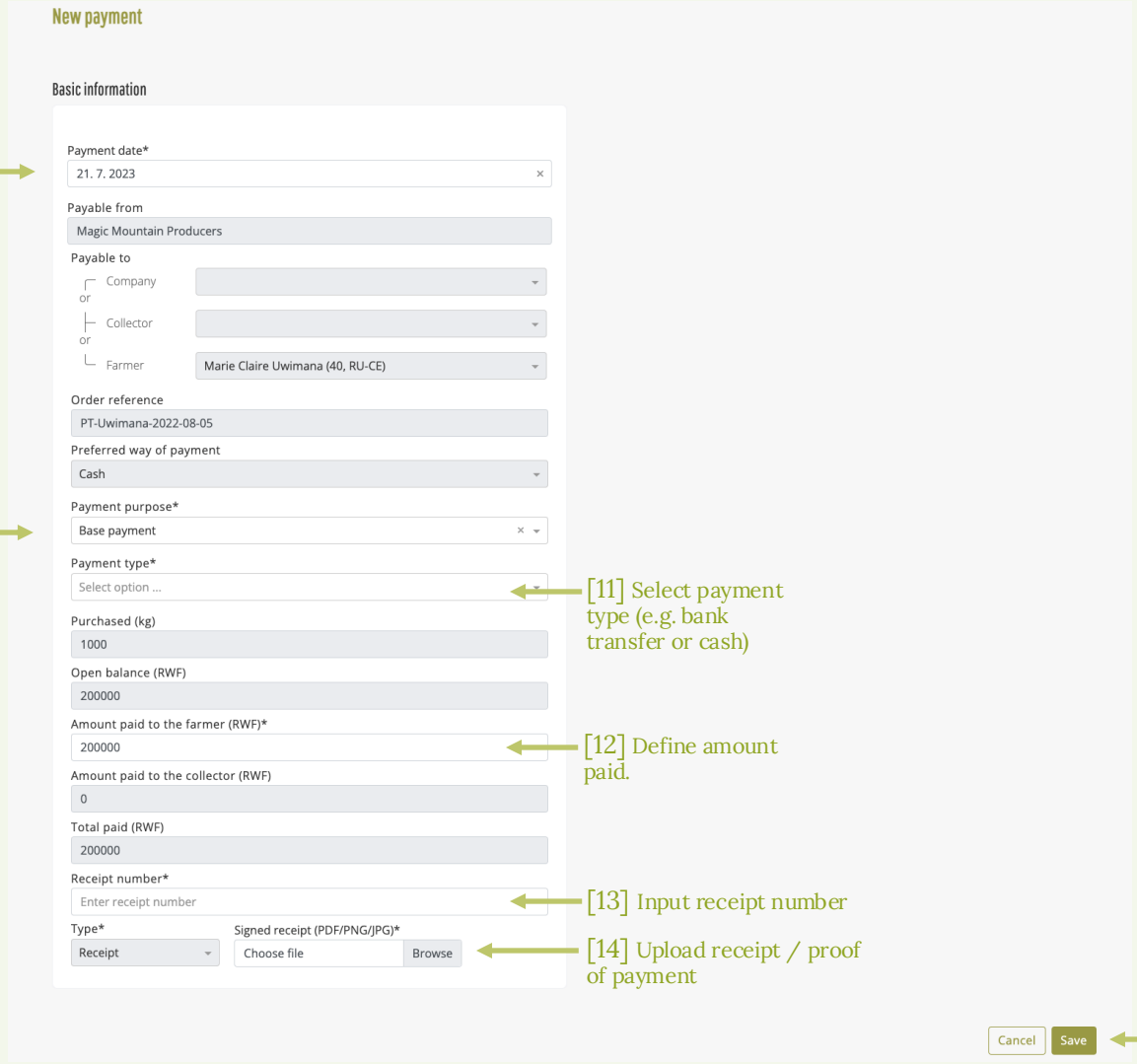


[6]

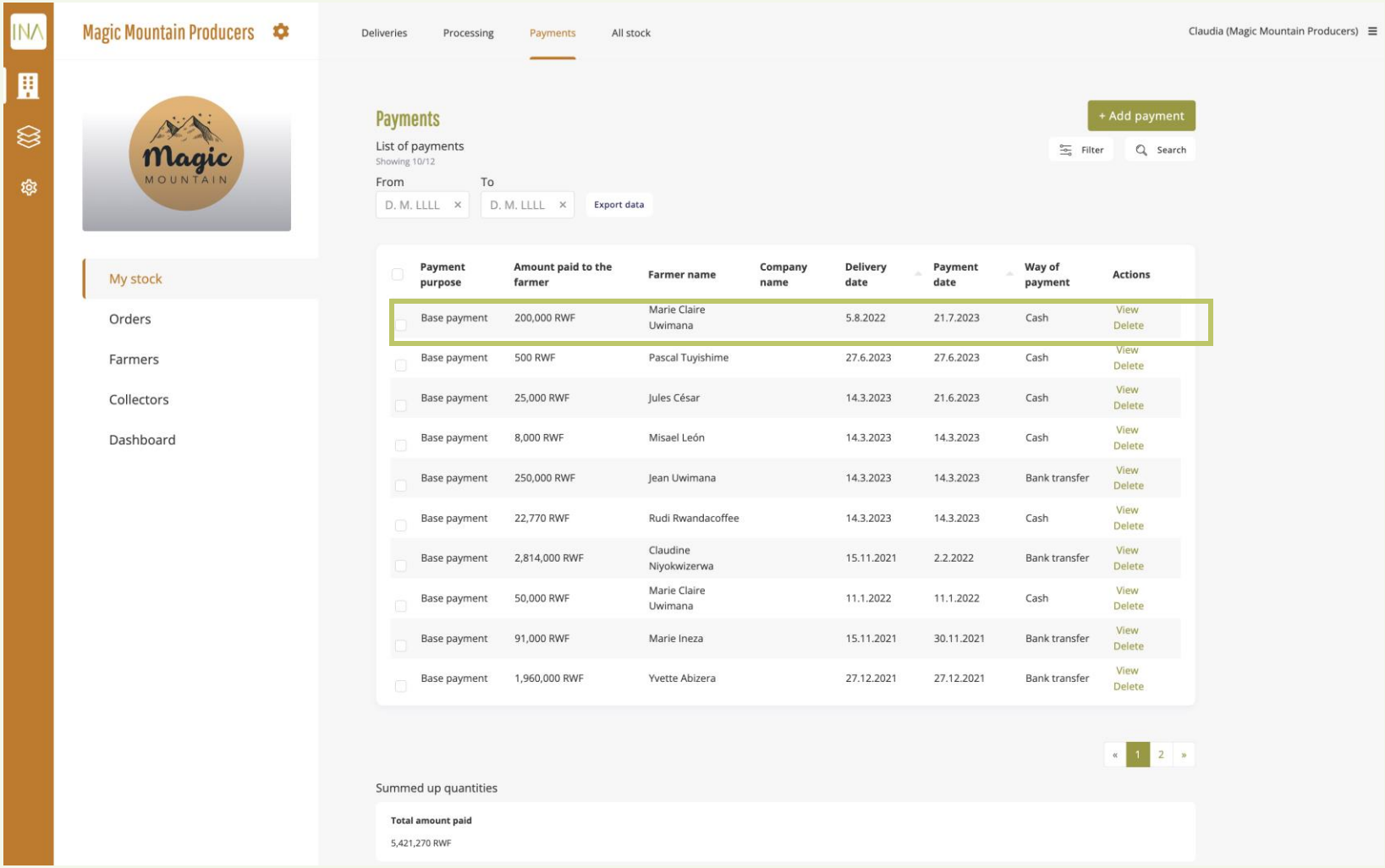
[7]

[8]

After confirming basic information about the payment, the "**New Payment**" page will appear with some prefilled information. You fill in all information related to the selected payment such as payment purpose, payment type, amount to be paid to the farmer, receipt number and upload a signed receipt as per the below screen. To validate the payment, click on save.

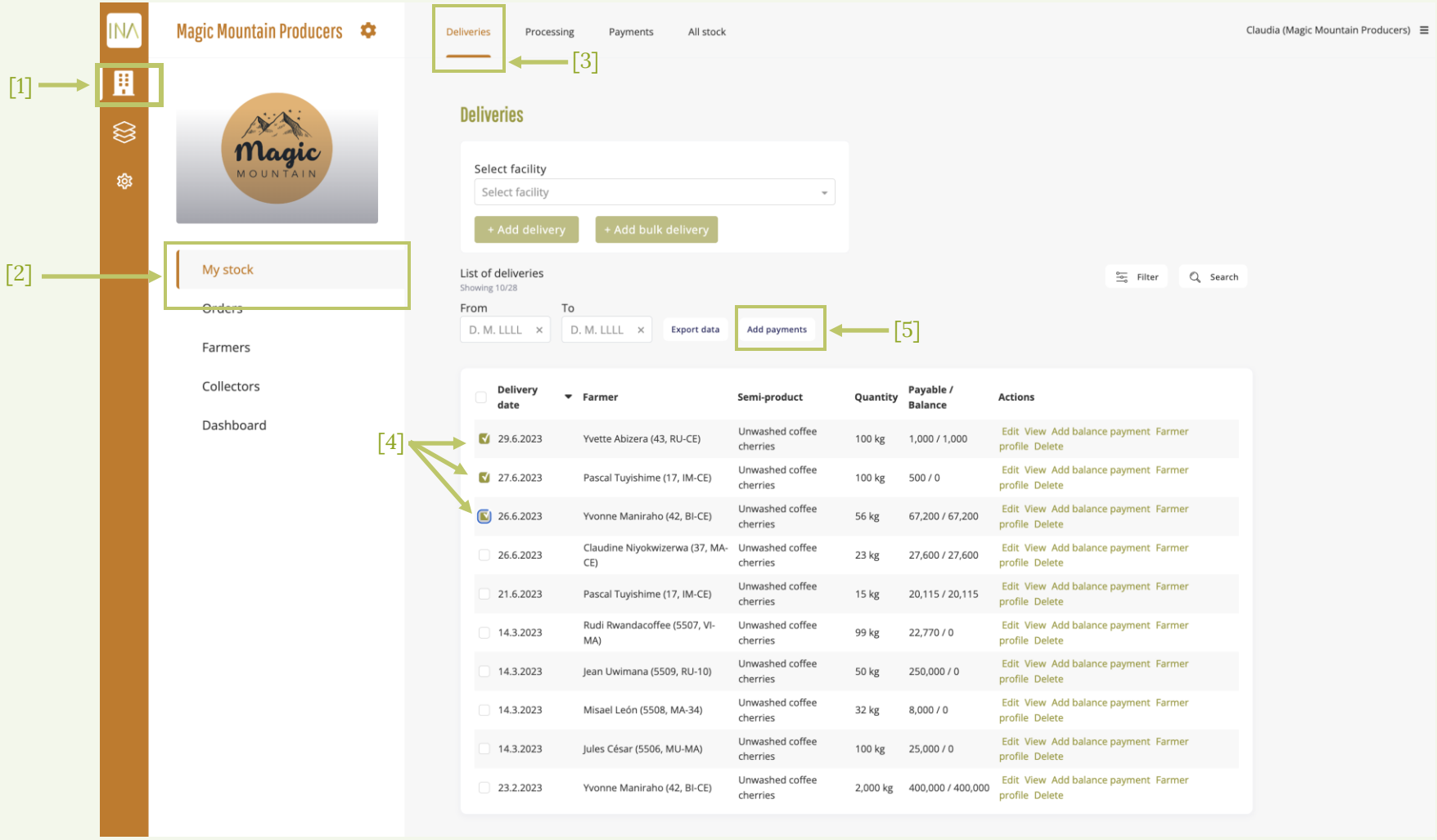


The payment performed will then be viewed in the list of payments as below.

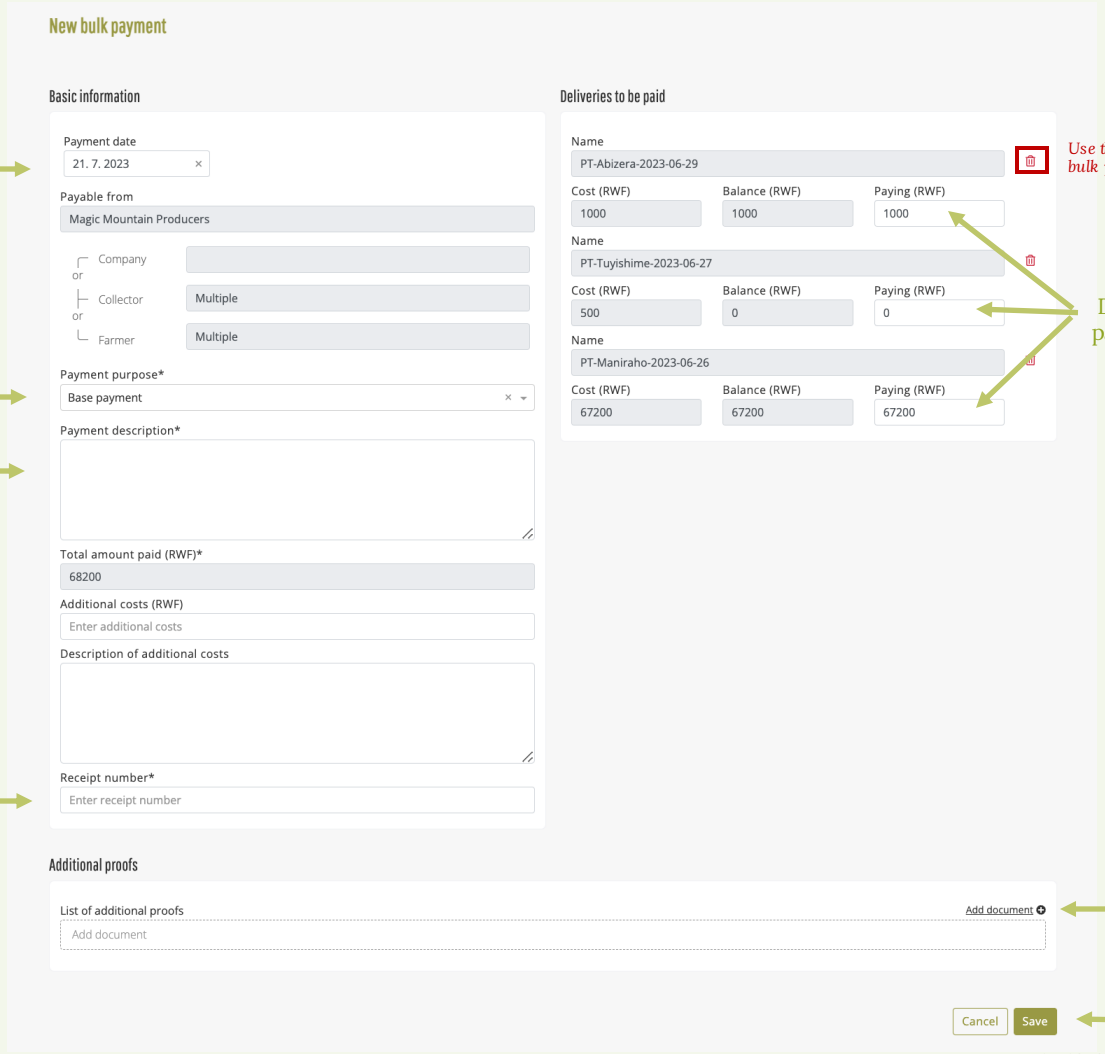


4.2 Recording Bulk Payments

Under deliveries tab, select a list of that need to be paid for, then click on "**Add payments**" button.



Add the details of all the payments to be made as per the below page of "**New bulk payment**": fill in required information such as payment purpose, payment description, additional proofs and other details related to purchase orders to be paid. To validate the payments, click on save button at the bottom of the page.



[6] Select payment date.

[7]

[8]

[9]

Use this icon to remove a delivery from the bulk payment to be made.

Deliveries to pay

[10] Upload receipts / proof of payment

[11] Save

Chapter 5.

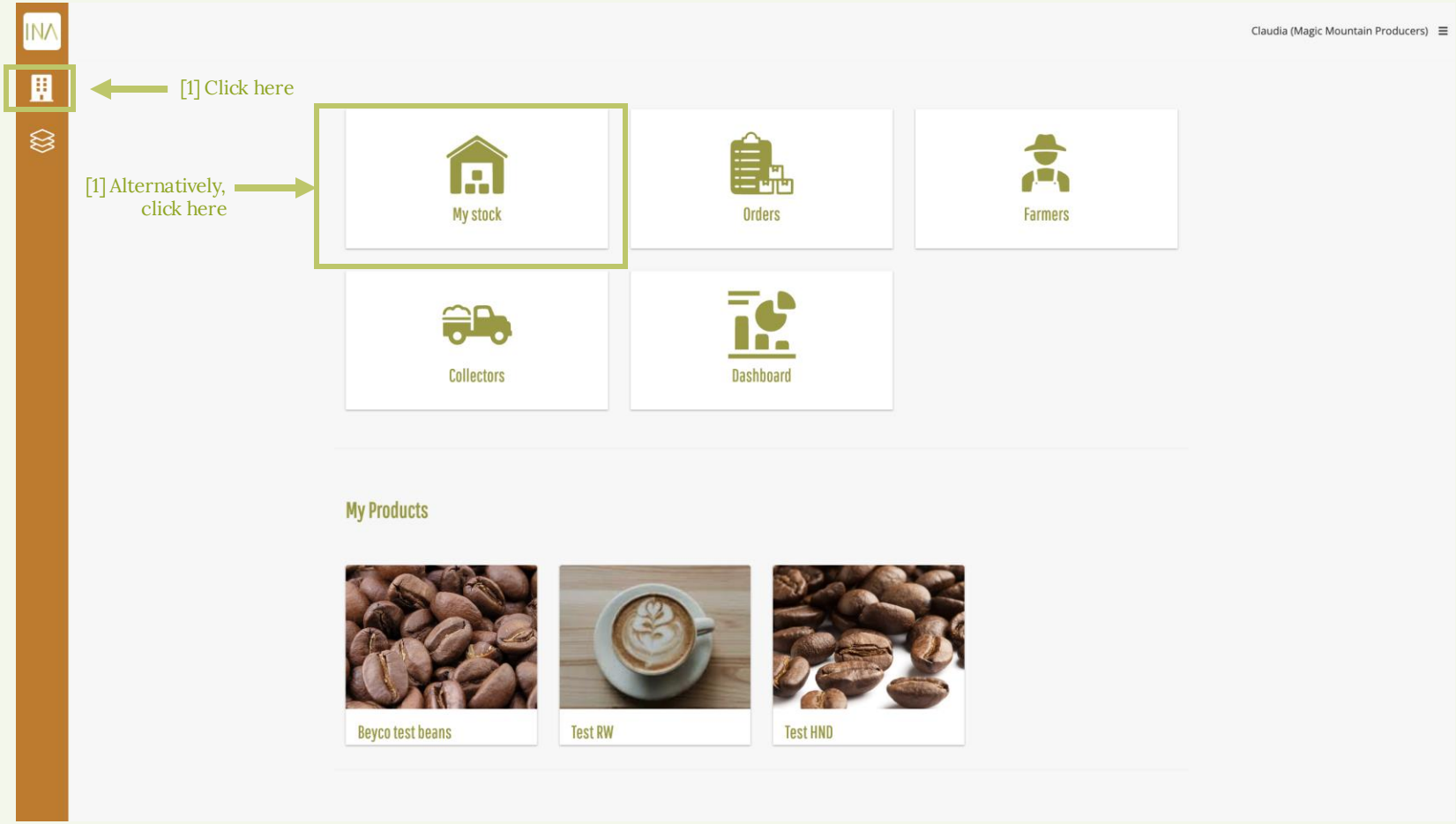
All Stock Module

This module allows system users to view the batch history as well as to edit or delete incorrectly recorded transactions.

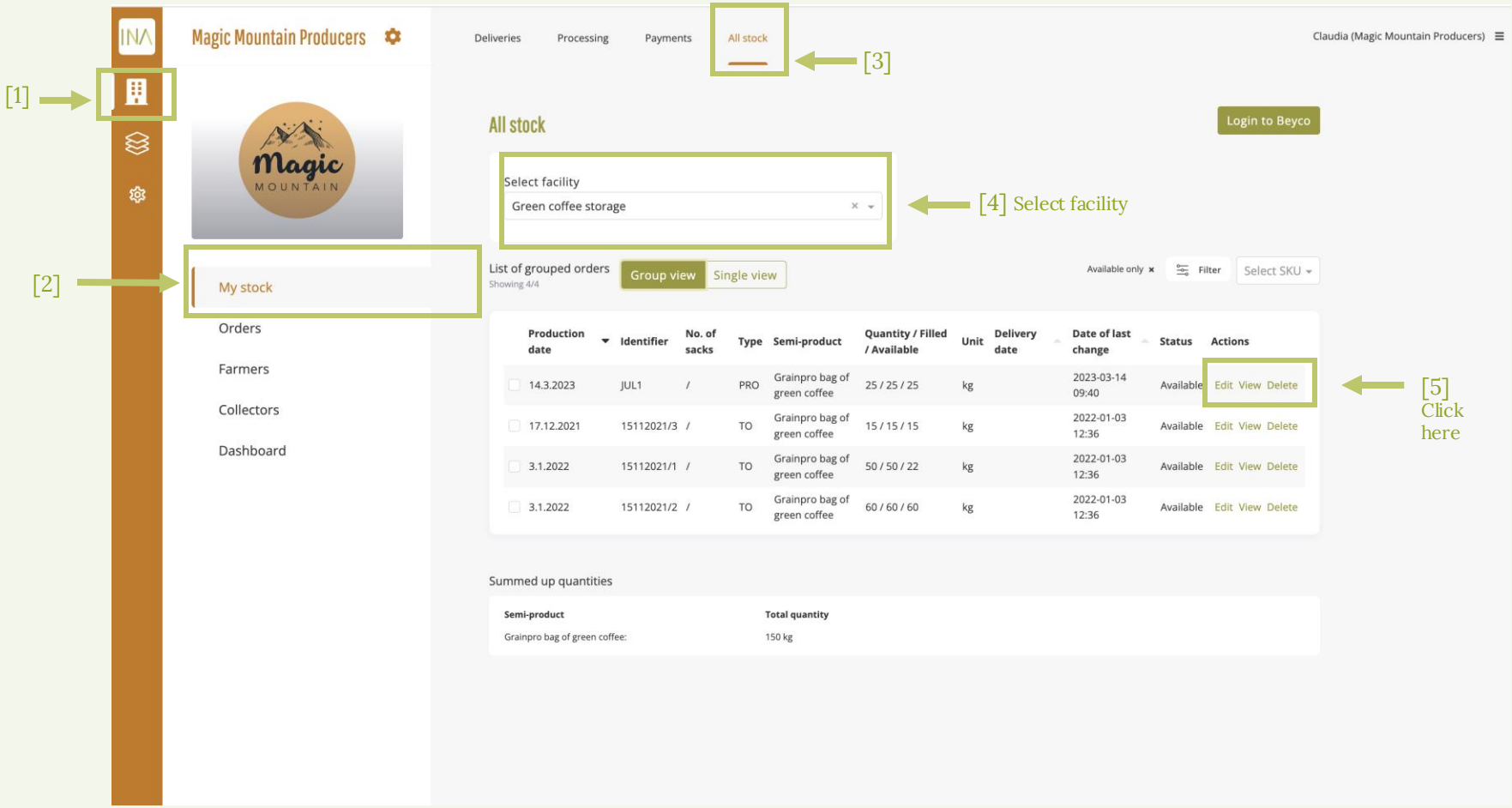
For coffee value chains, this module also allows offering stock items on the Beyco green coffee sales platform.

5.1 View stock and batch history

To view the history of a batch, click on the “Company” icon as shown on the screenshot below which leads you to “My Stock”. You can also go direct to “My stock” tile as shown below.

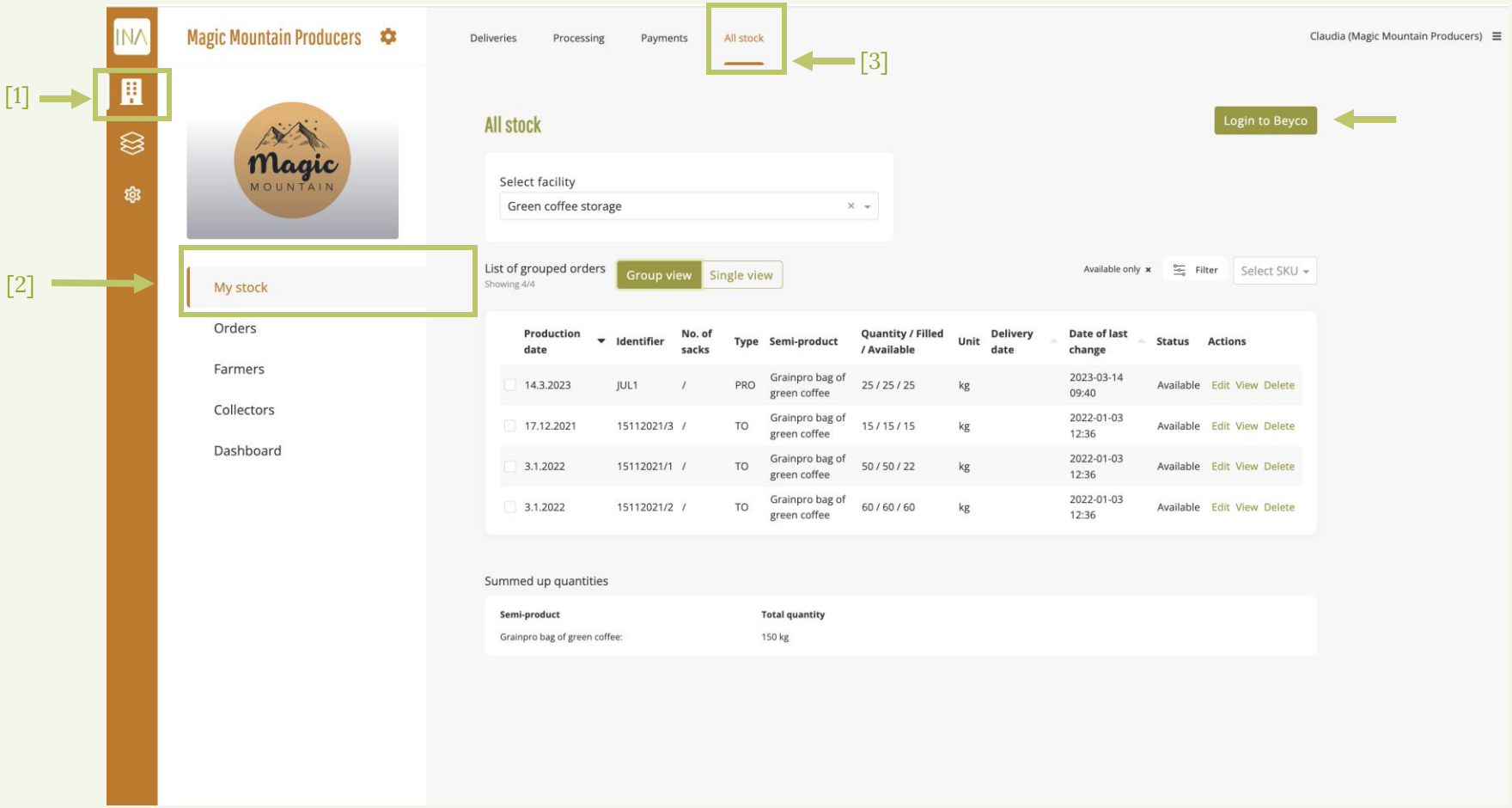


To view the history of a batch, follow the steps below. In case your batch shows as “available” you are also able to edit or delete the LAST transaction performed on it. Remove the “Available only” filter to see all batches. In case your batch shows as “not available”, it might already be processed further and will be found as “available” in another facility of your company. If you wish to see individual items of a batch or any QR codes that might exist for this batch, switch to “single view”.

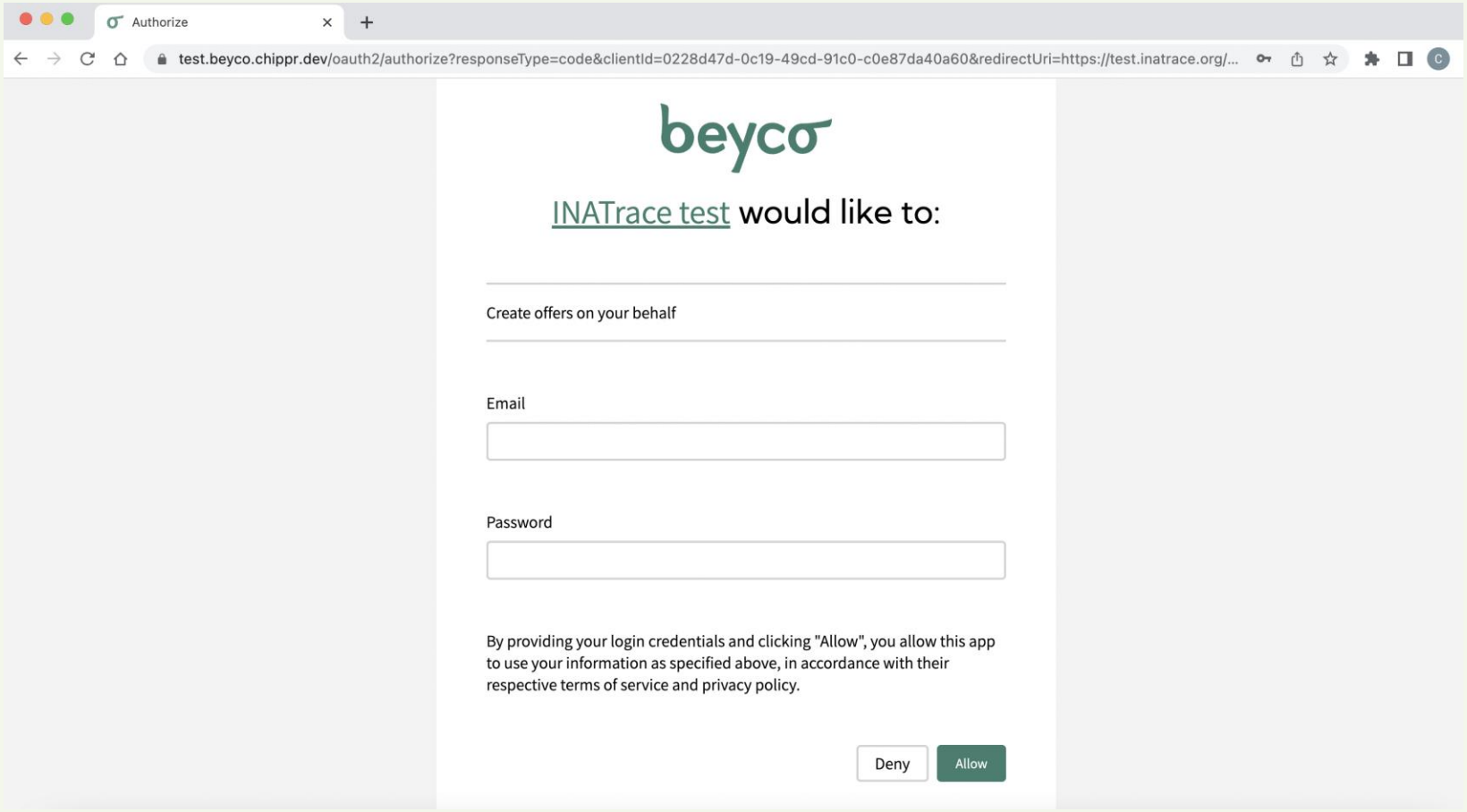


5.2 Create an offer on Beyco (coffee only)

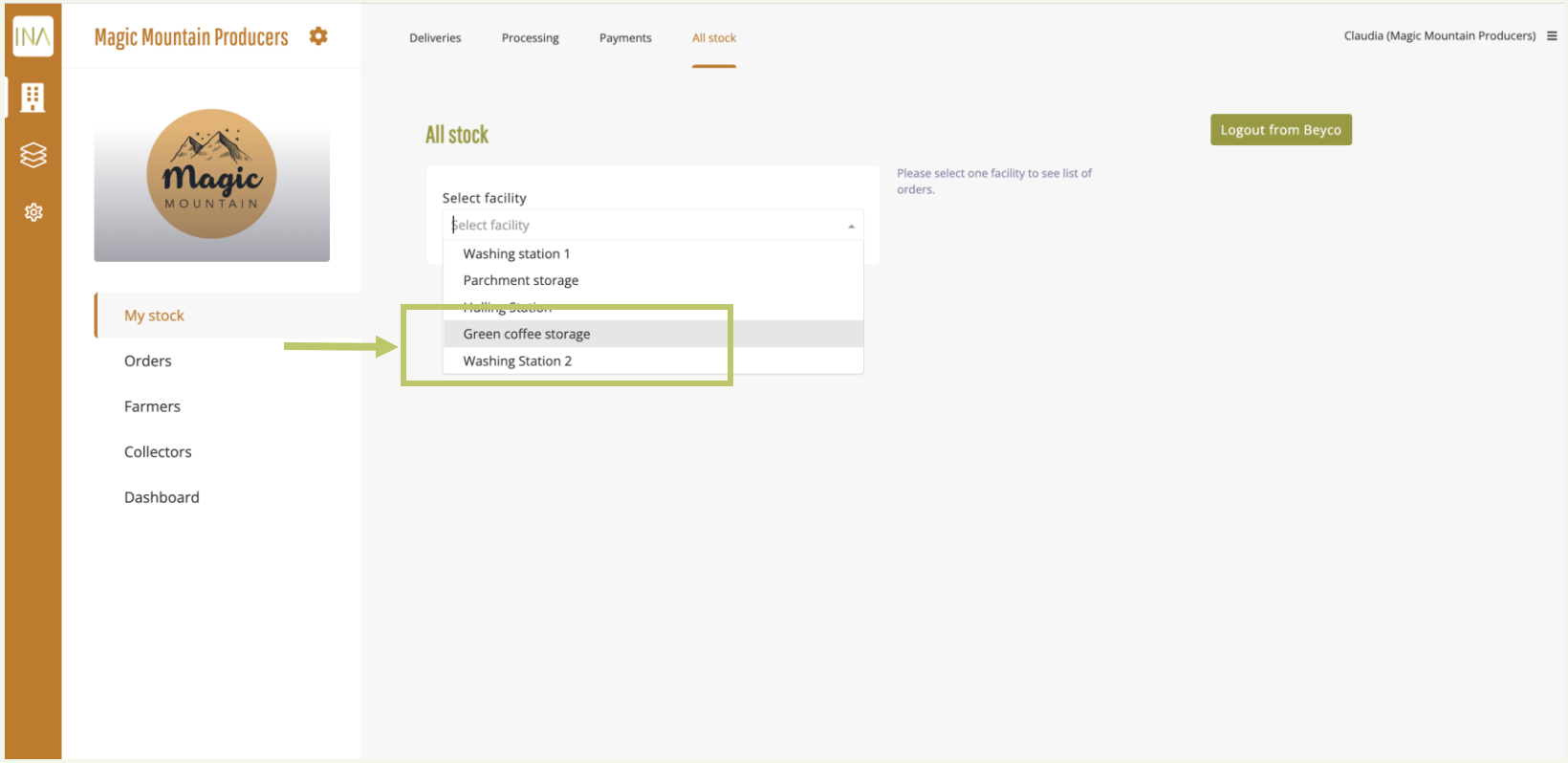
In order to create an offer on the Beyco coffee sales platform, you need to be a registered user on Beyco and also need to have the Beyco integration activated in your INATrace company configuration. After that, start the session by following the steps below.



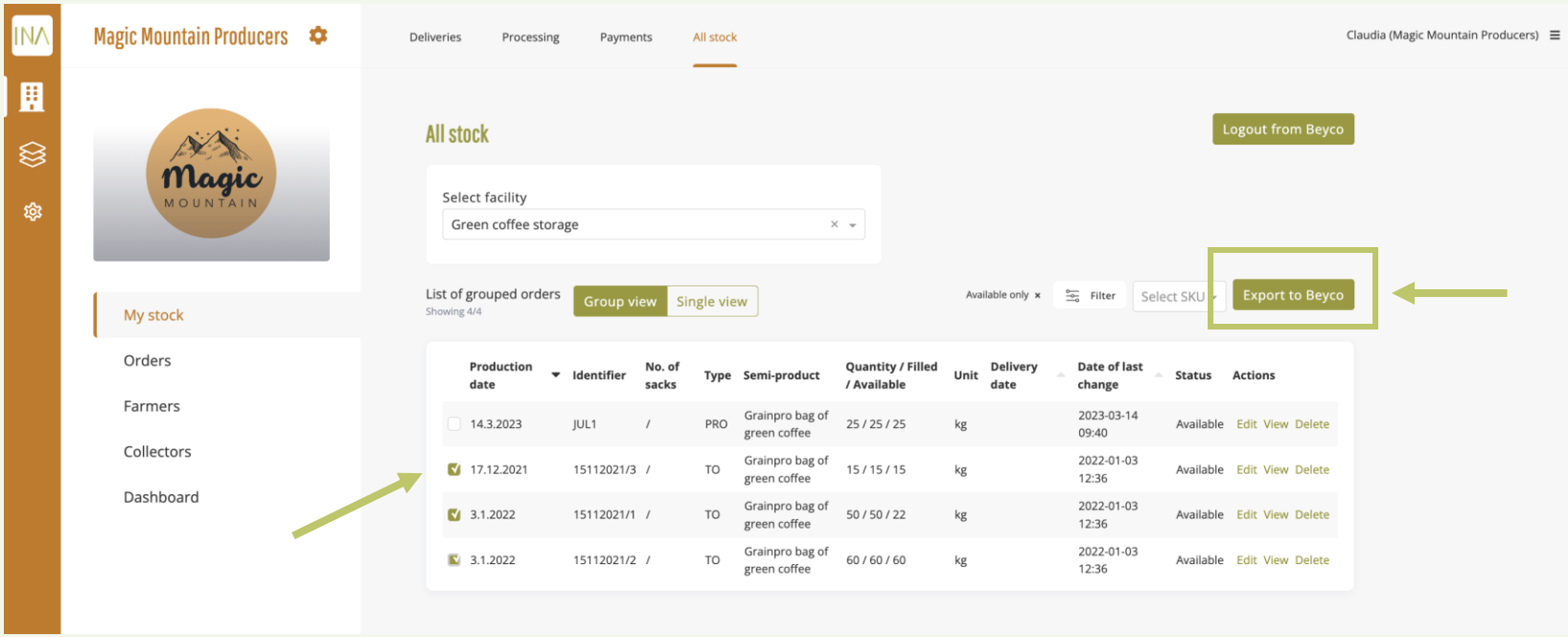
You will be asked to enter your email address and password you used for your registration on beyco.nl and click “Allow”.



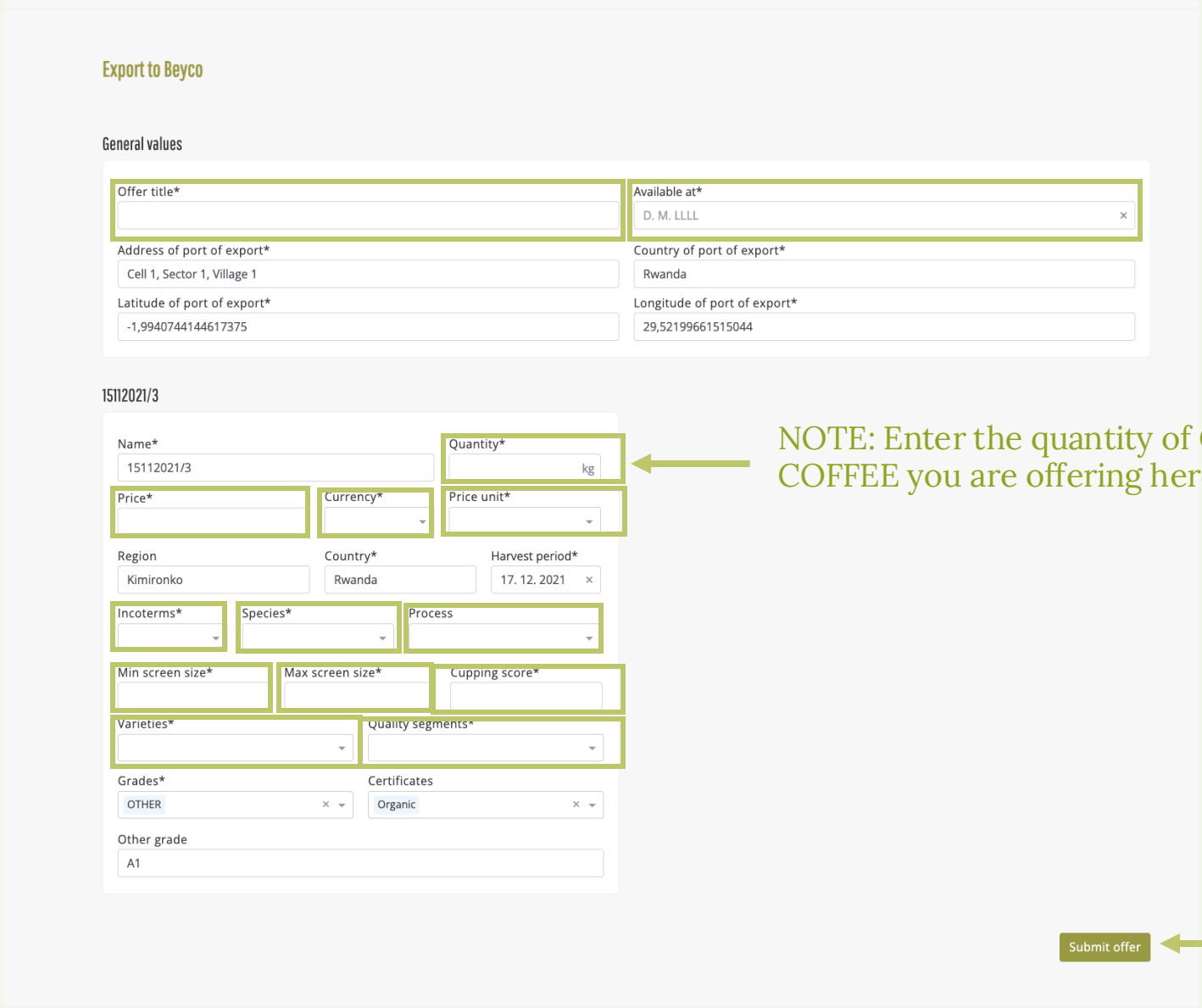
You will automatically be redirected back to your ”All stock” section of your INATrace profile. Select here from the drop-sown menu the stock facility where the coffee batches you want to offer are currently stored.



Next: Select one or several available batches of coffee from your stock that you want to create an offer for by checking the box(es) next to it. Then, click on “Export to Beyco.”



Complete the empty fields which are required for the offer and click “Submit offer”.



NOTE: Enter the quantity of GREEN COFFEE you are offering here

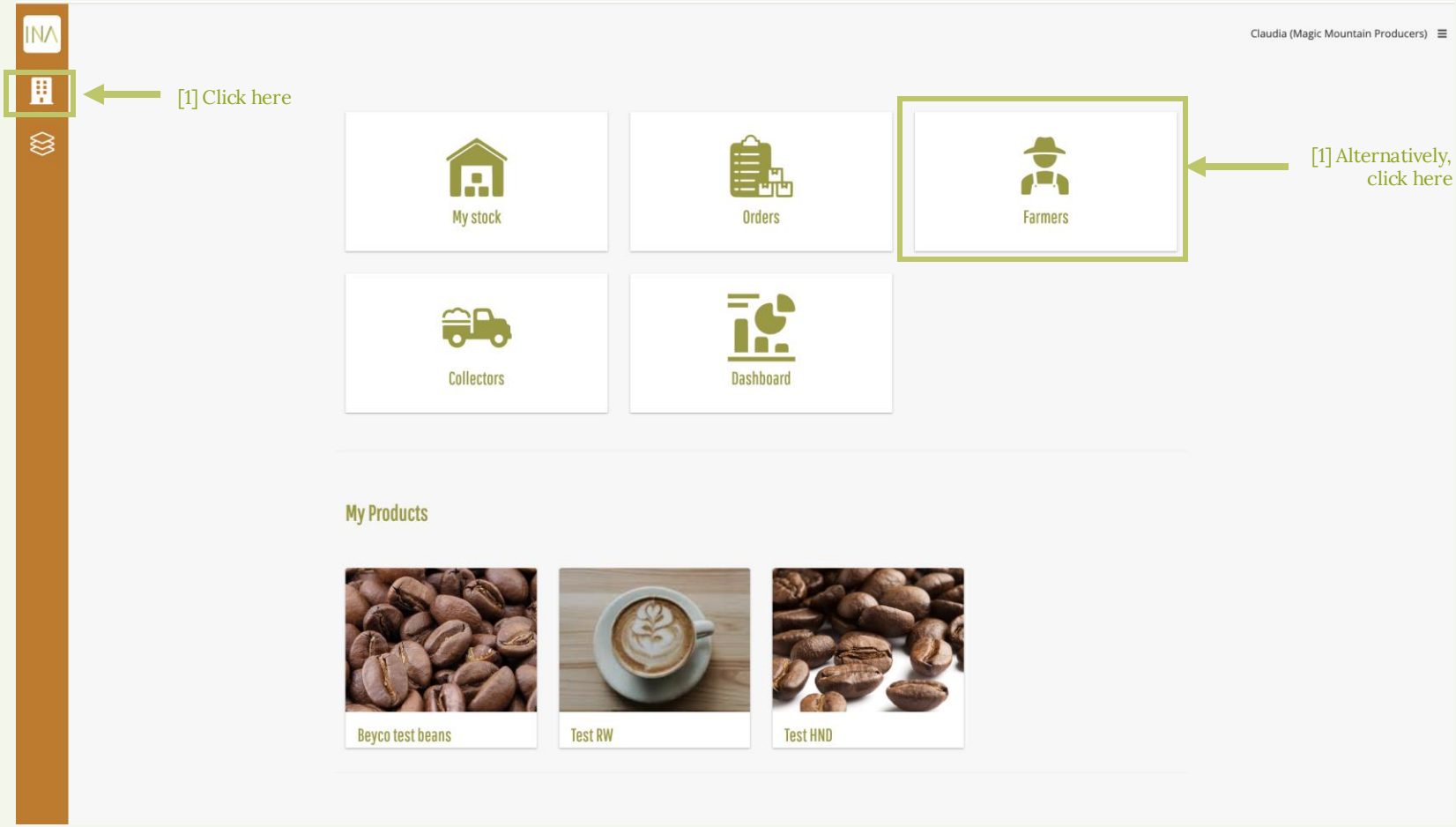
Chapter 6.

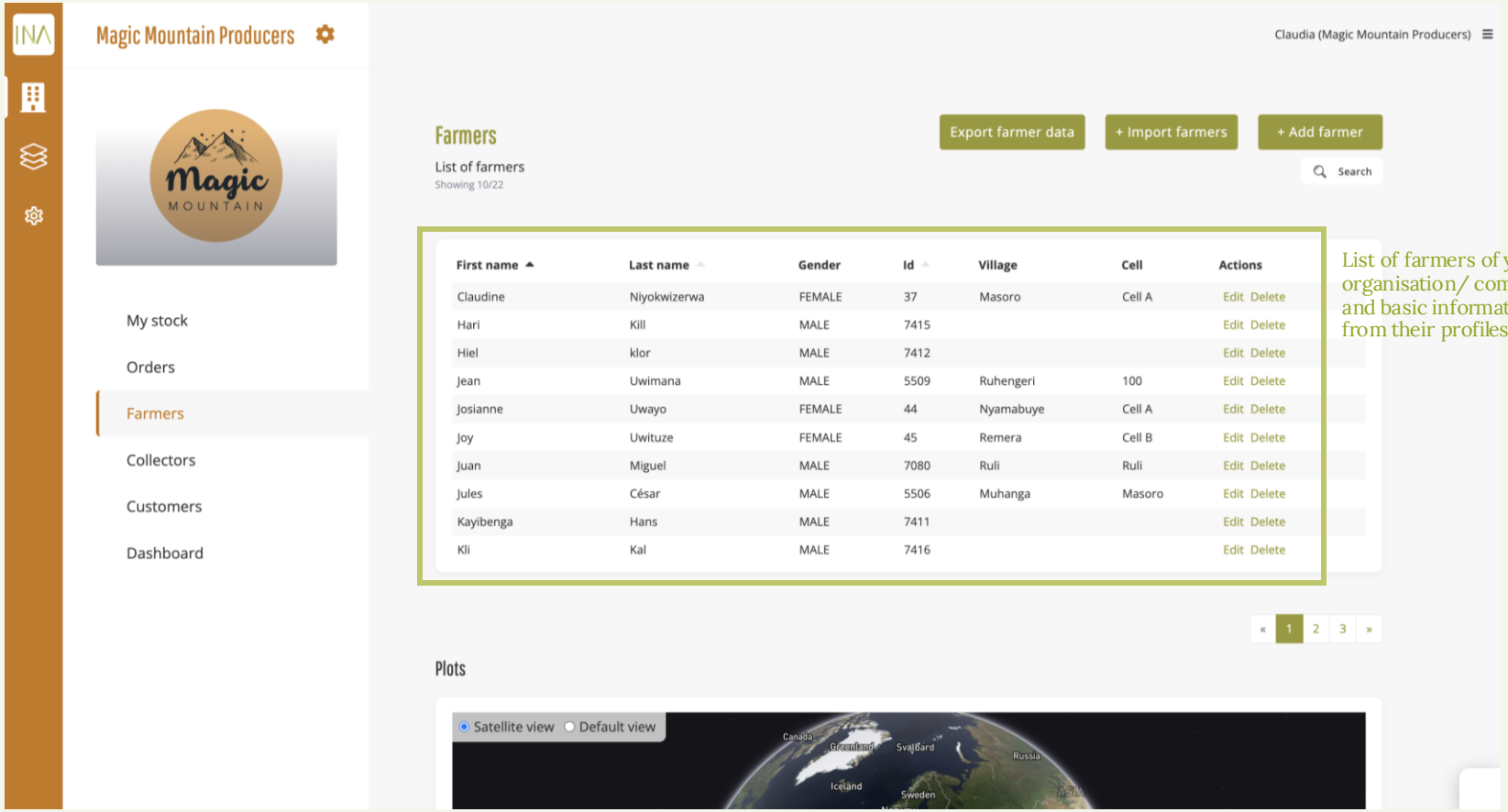
Farmer profiles

This module guides system users to add and edit farmer profiles.

6.1 Access farmer profiles

To access your farmers' profiles, click on the "Company" icon as shown on the screenshot below and select "Farmers" from the submenu. You can also go directly to "Farmers" tile as shown below.

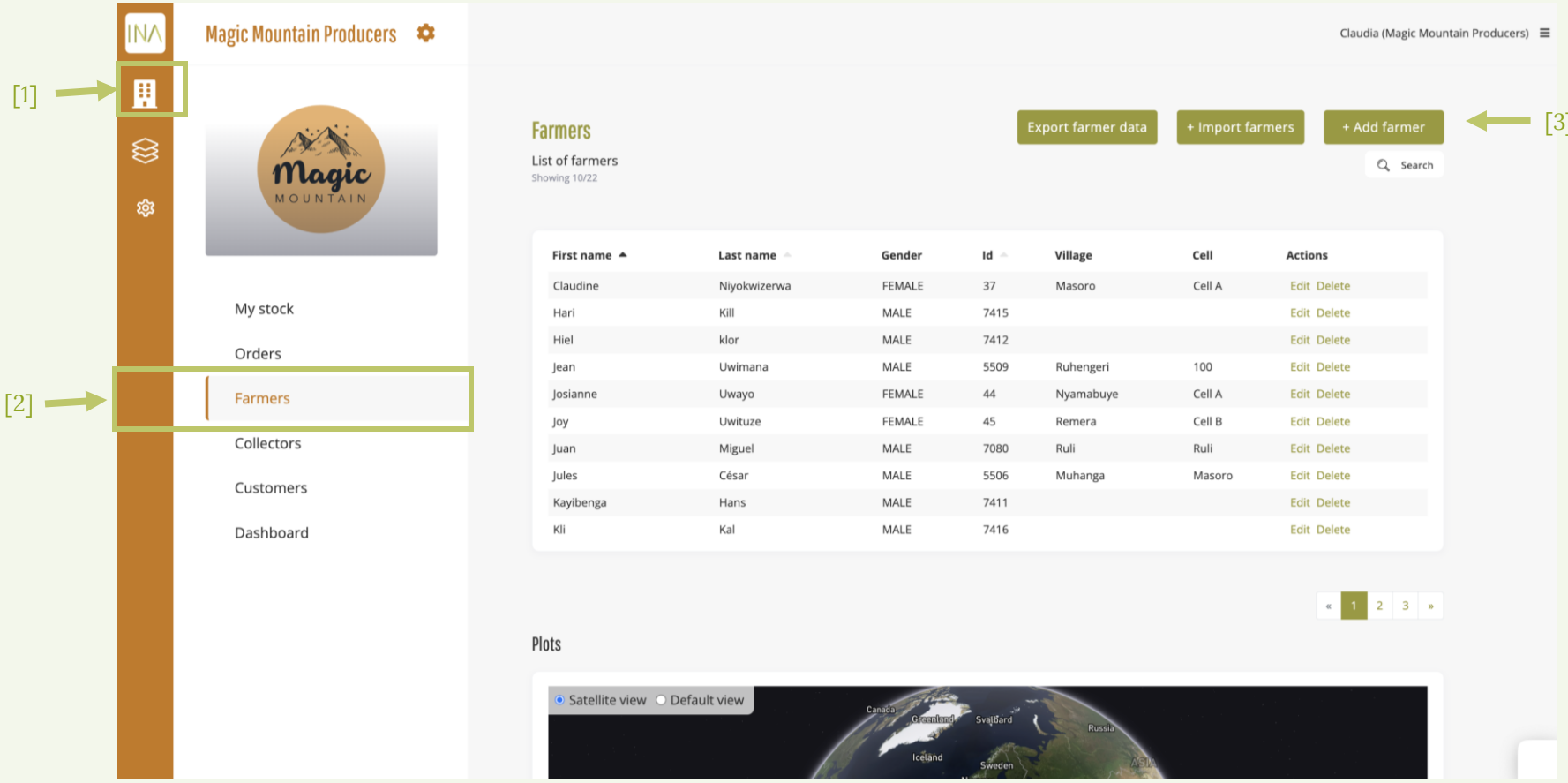




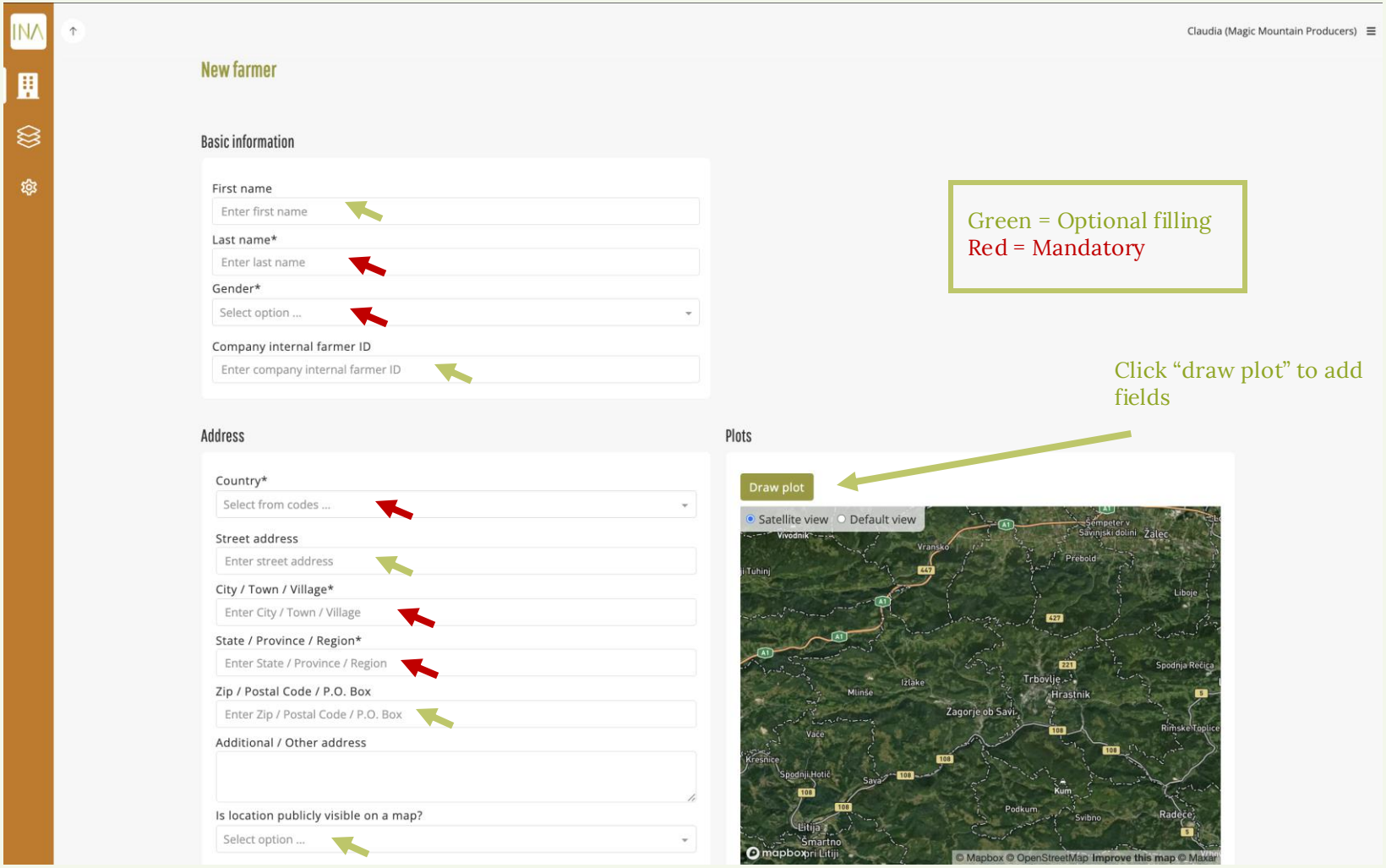
List of farmers of your organisation/ company and basic information from their profiles.

6.2 Create a new farmer profile and add plots

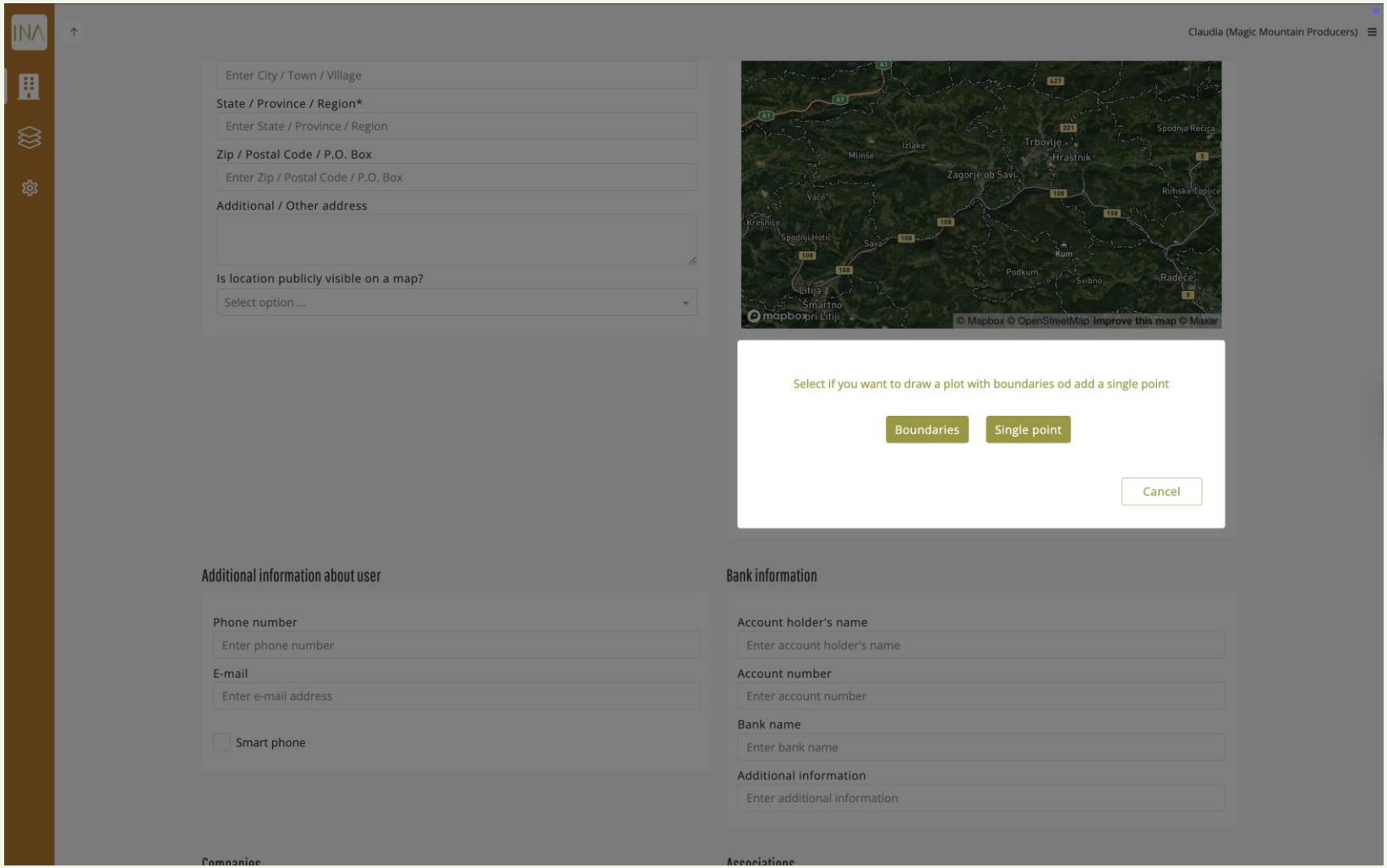
Inside “Farmers” page, click on “Add Farmer” button to create a new farmer profile.



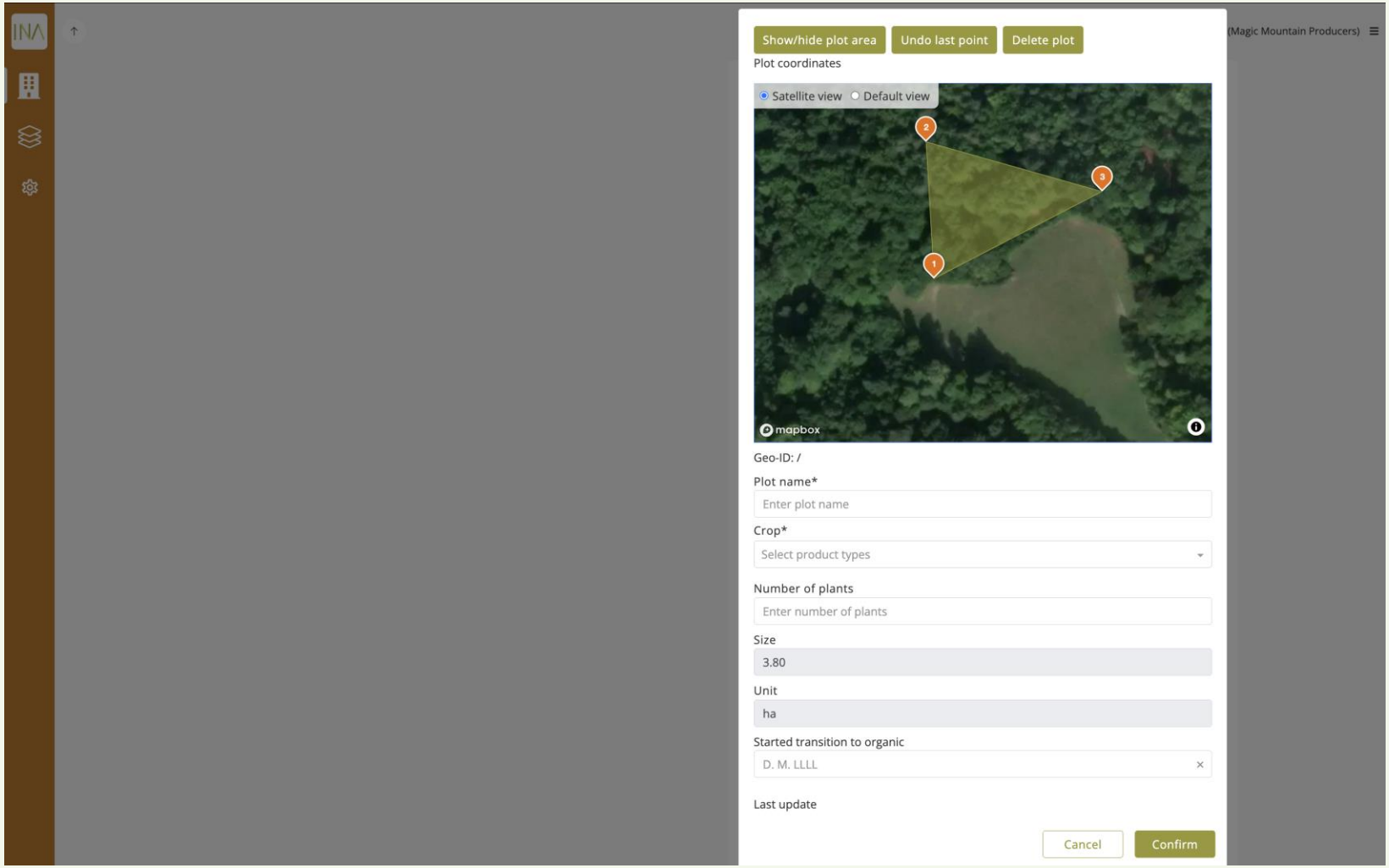
Add Basic information and Address. Then you can add plots by clicking on “draw plot”. Alternatively, you can also add plots using the mobile app.



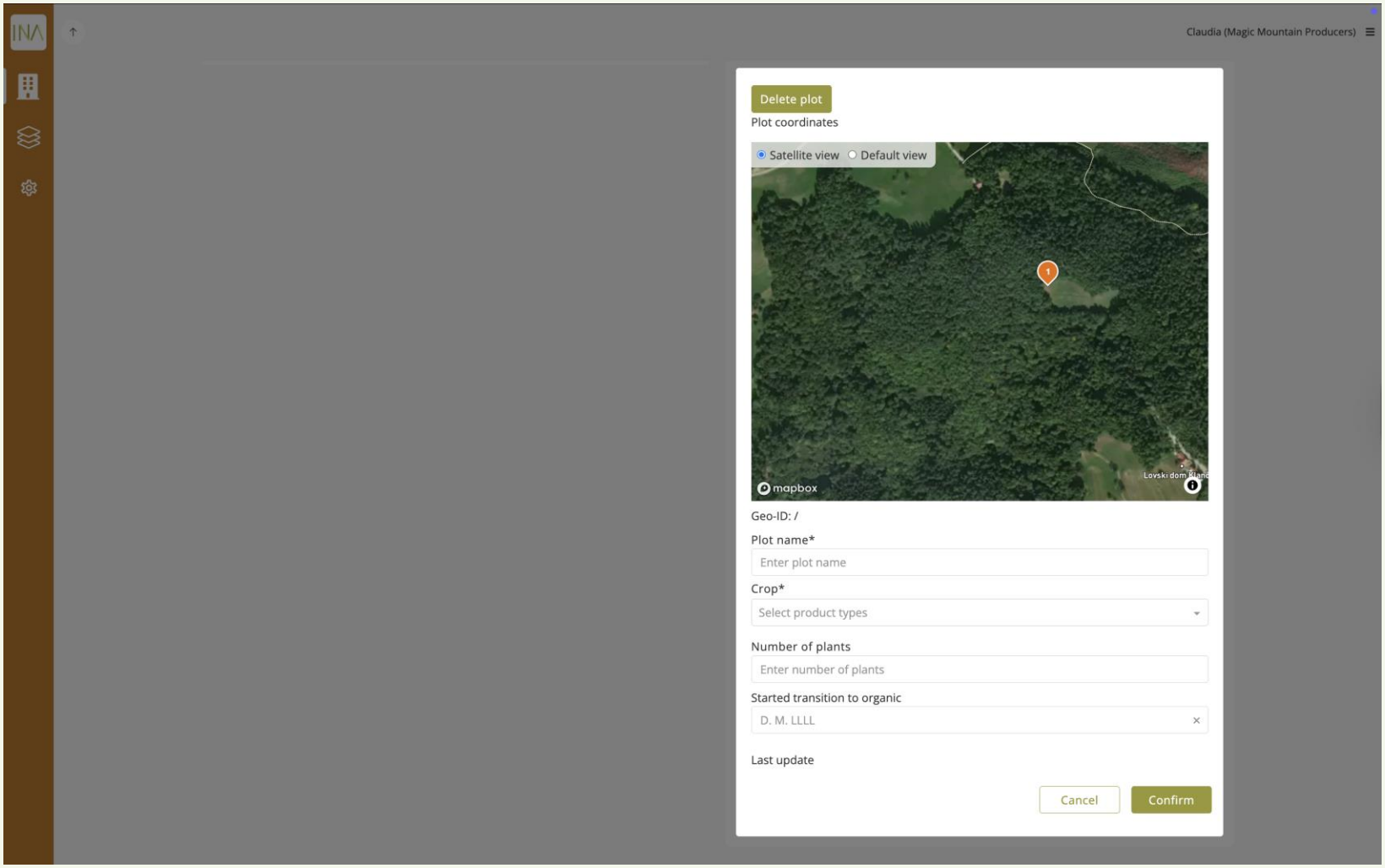
You can choose to add boundaries if you are familiar with the boundaries of the plot or you can add a single point if you don't have the detailed plot information.



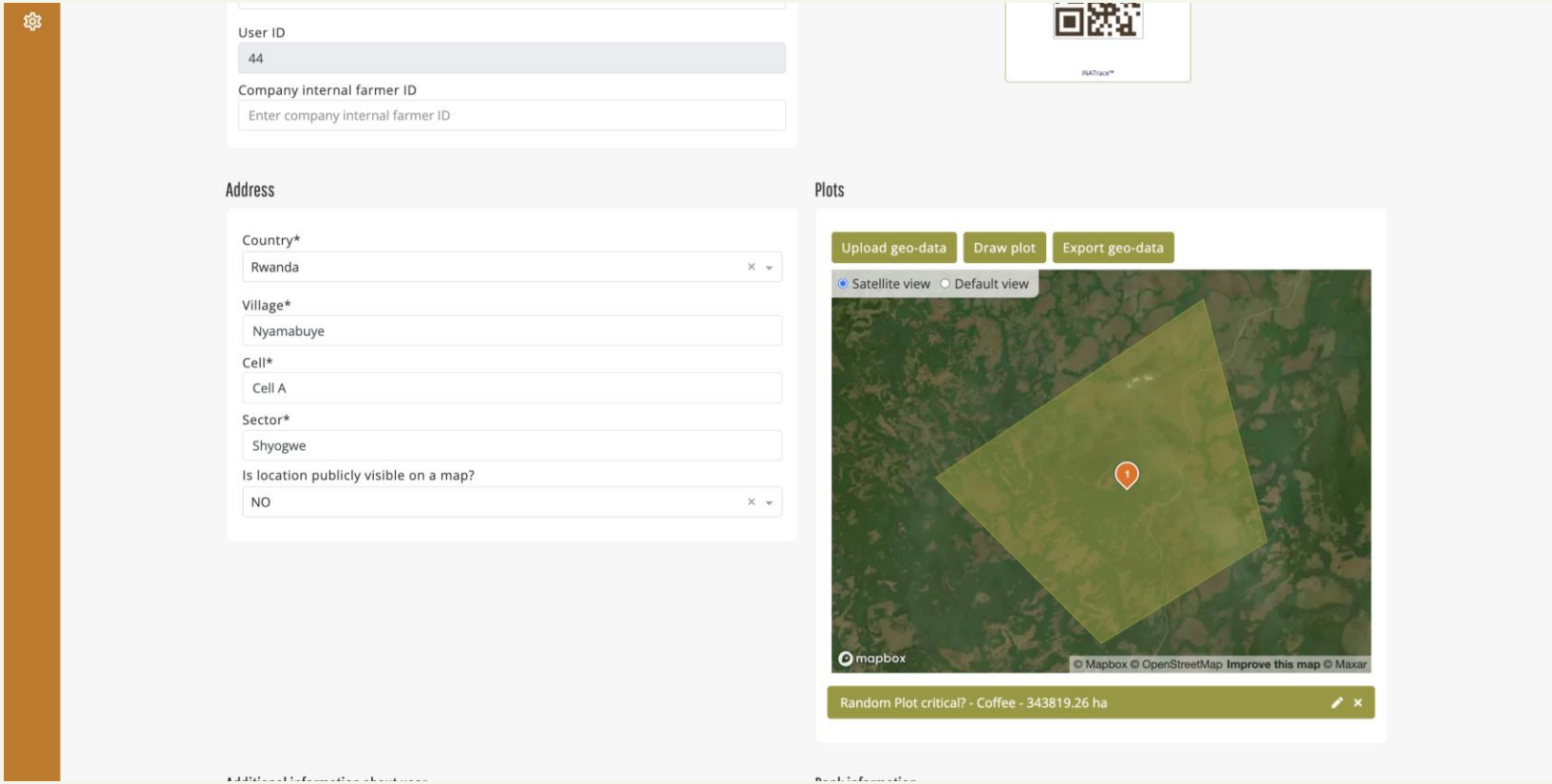
If you selected “**Boundaries”,** you can now define the corners of the plot by clicking on the map. You can always use “Undo last point” or “Delete plot” in case you clicked in a wrong place. You also have the option to switch between Satellite view and Default view for better orientation. Next: Fill in the plot information and click “Confirm”.



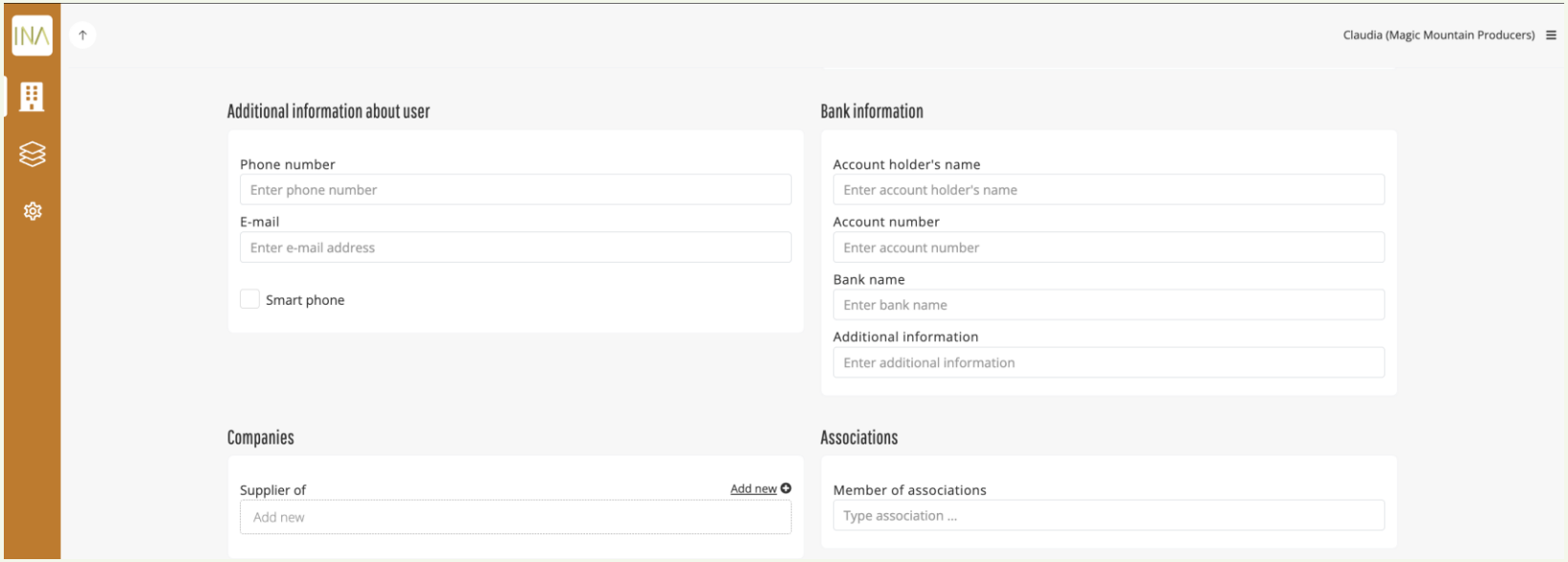
If you selected “**Single point**”, you can now define where the plot is located by clicking on the map. You can always use “Delete plot” in case you clicked in a wrong place and place the mark again. You also have the option to switch between Satellite view and Default view for better orientation. Next: Fill in the plot information and click “Confirm”.



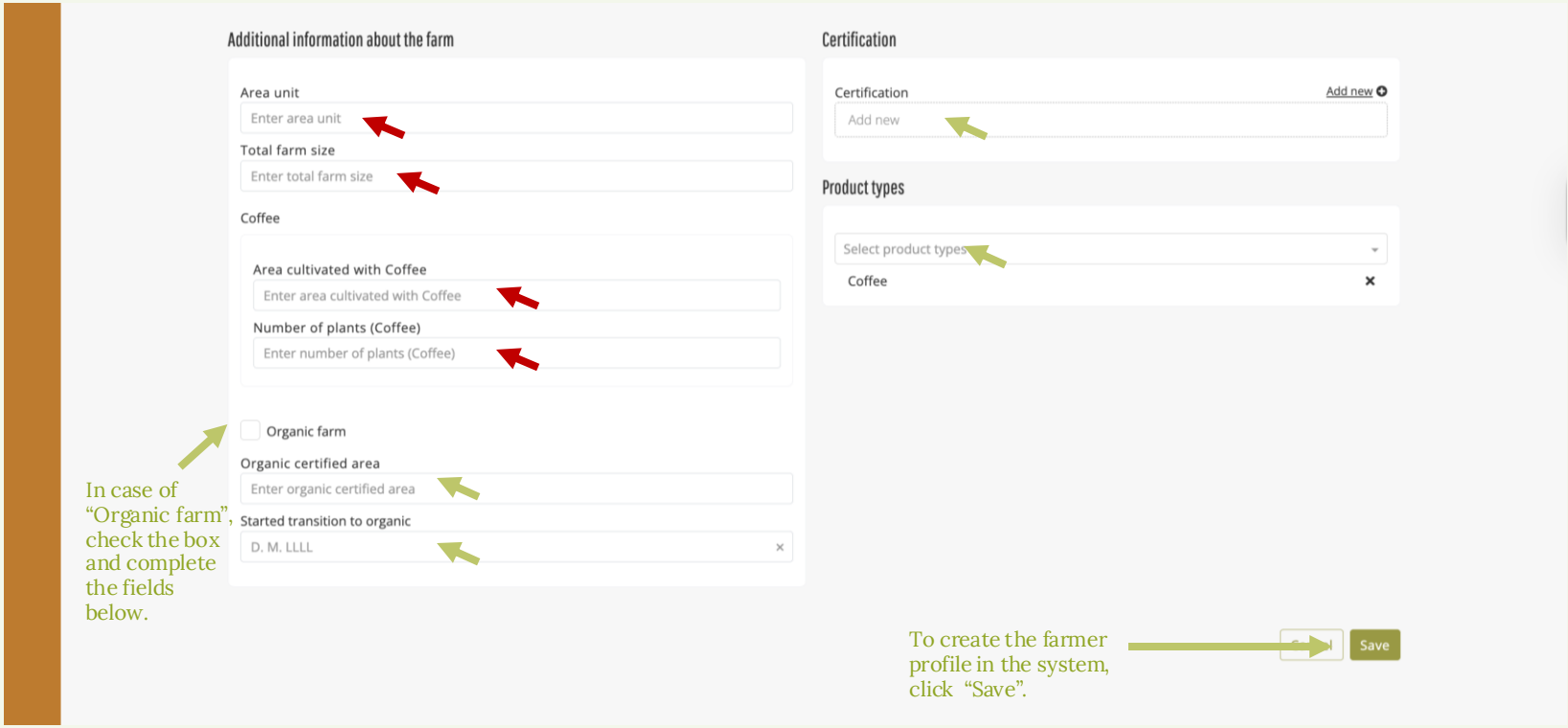
After adding your plot, you will be directed back to the the farmer profile. You can add additional plots by drawing them or uploading geo-data.



To complete the farmer information, you can add additional farmer information like contact details or bank information. This is optional. In the ”Companies” section the farmer is already allocated to your company / organization. You do not have to select anything here. You will only be able to link a farmer to an association in case the association uses INATrace as well and has an active company profile.

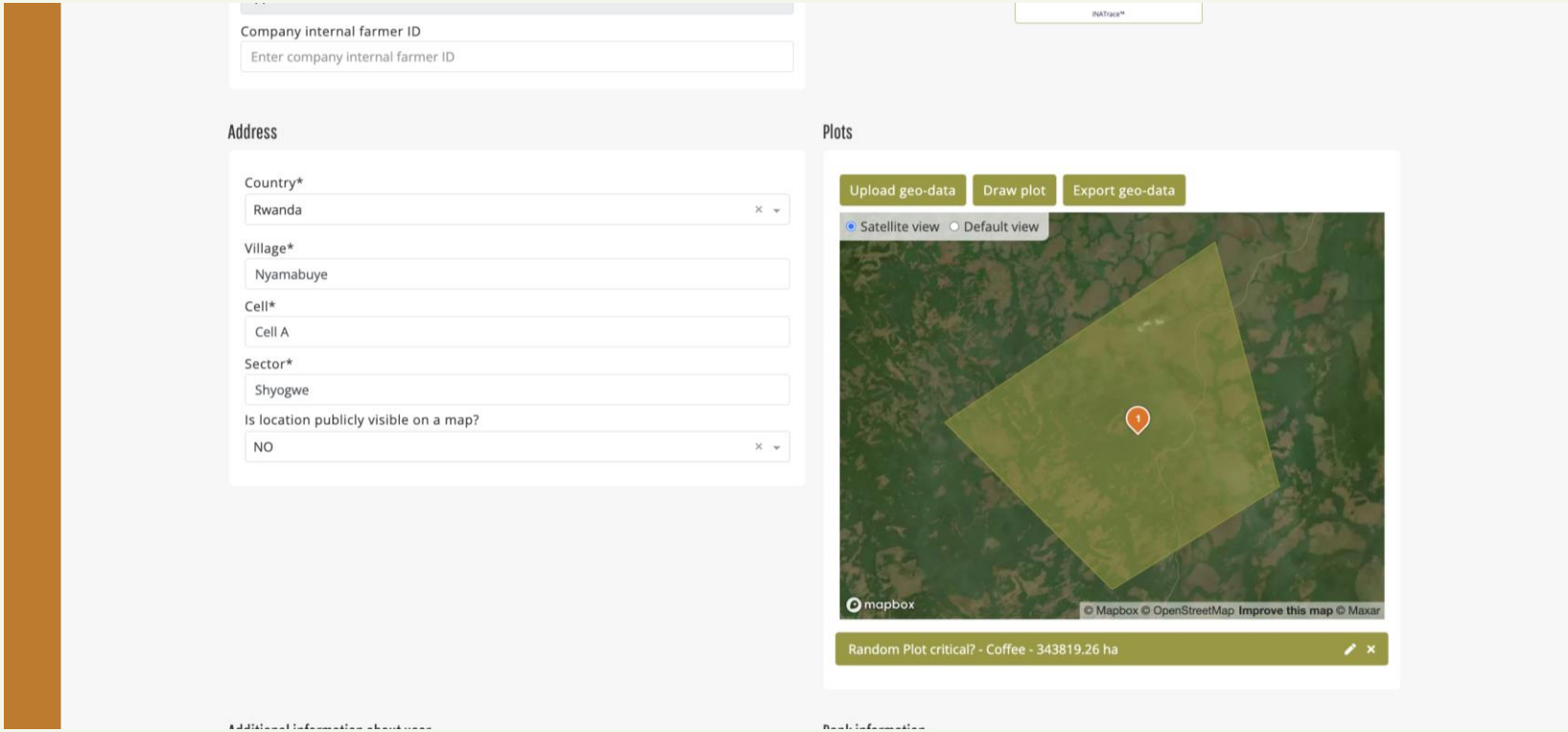


Complete now the information about the farm by adding the total size of the farm and the cultivated area with the specific crop you are tracking. The product type will already be pre-selected in the farmer profile. You can add an additional crop under “product type” though in case the product type was configured by the admin. Click “Save” to finish the process of adding a new farmer.

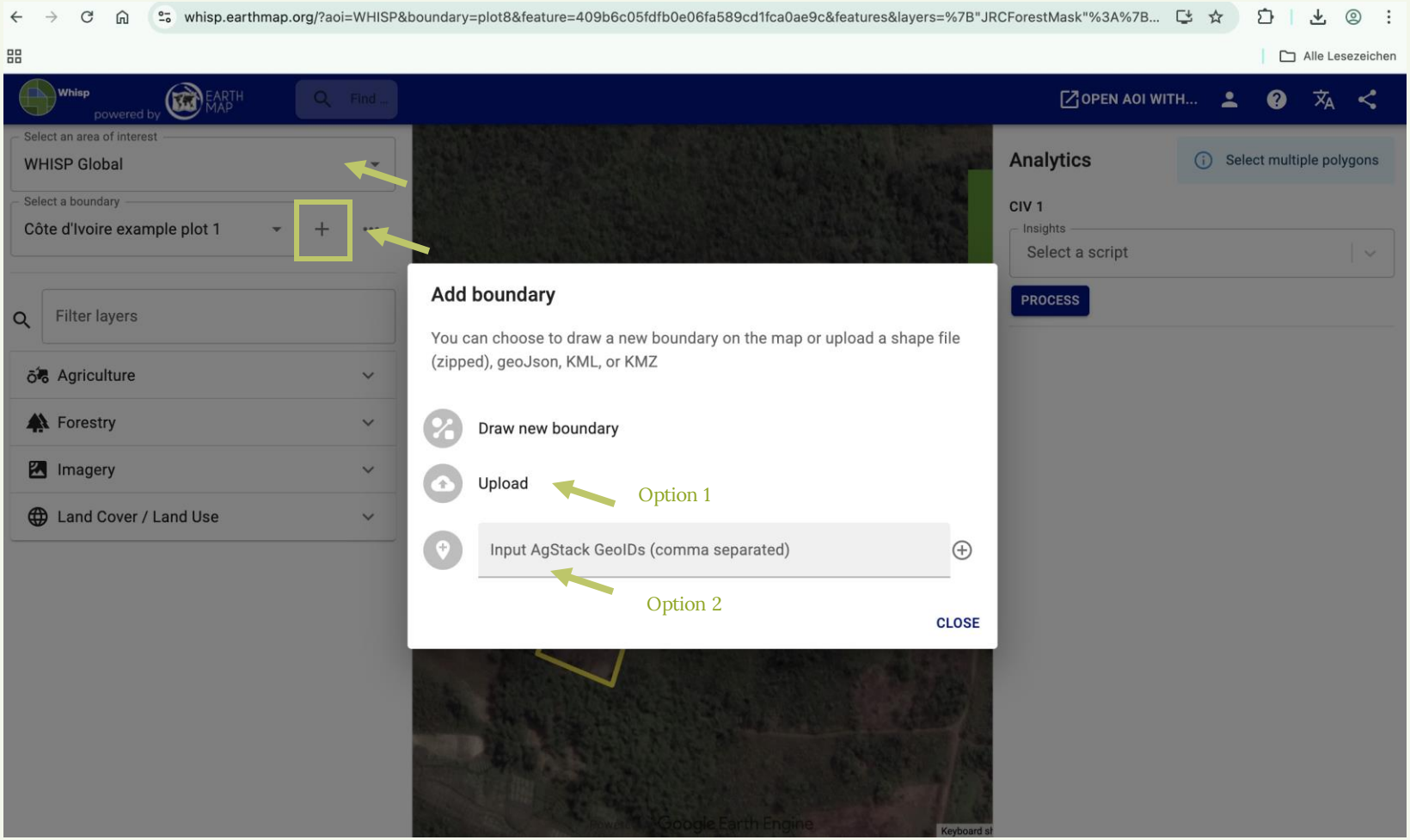


6.3 Export and analyze geo data

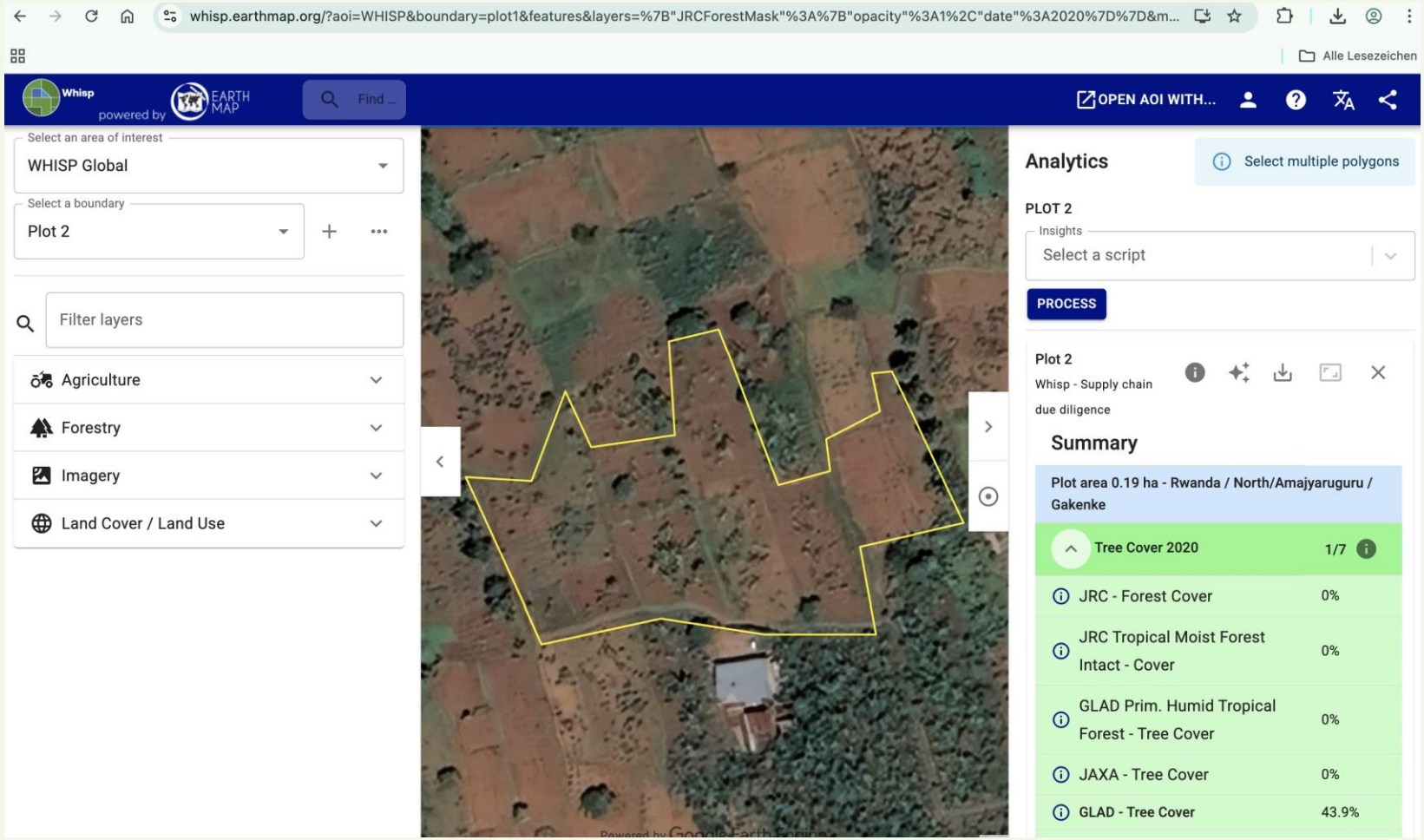
Once you have added a plot, you will have the additional button “Export geo-data” available inside a farmer profile. This allows you to export a .json file with the farmers’ geo data in order to analyze the deforestation risk in a next step. By clicking on the pen icon next to your plot, you can also see and copy the Geo-ID of a specific plot in case you want to analyze a single plot.



Once you have downloaded or copied your geo data, you can use a free tool like https://whisp.earthmap.org to analyze your data for deforestation risk. You will have to select your area of interest,and then use the „+“ symbol to add the plot boundaries. Next, you have to upload the file you exported from INATrace (Option 1). Note that if you have a .json file, you will have to rename the file name ending into .geojson before uploading. You can also paste in directly the Geo-ID that you copied from a specific farmer plot in INATrace (Option 2).



After adding the plot(s), you have a number of different analytical tools available on the right side of the user interface. You can also activate or deactivate specific layers on the left side of the user interface. Here you find more extensive information and resoucres about the Whisp tool.



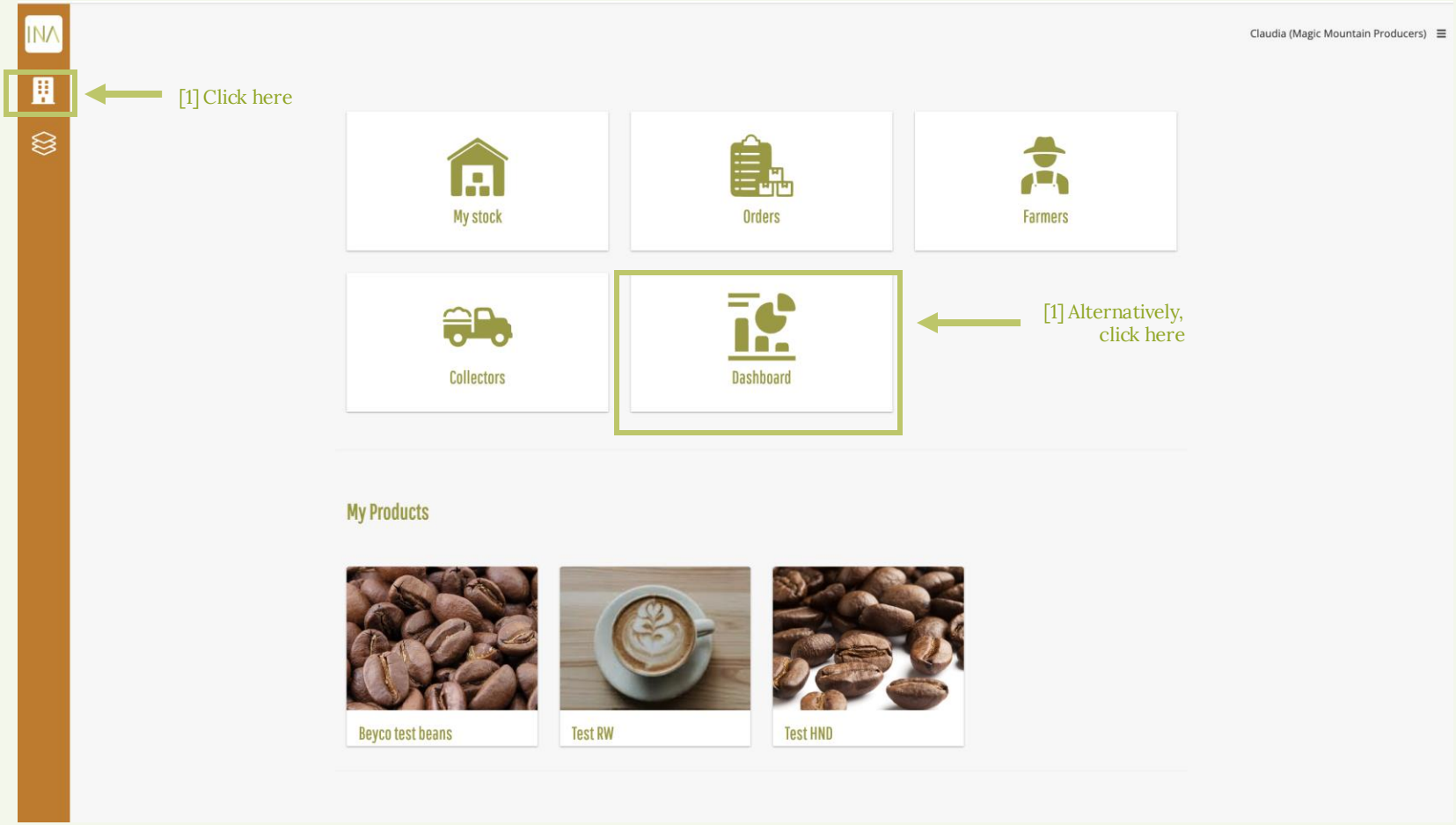
Chapter 7.

Dashboard

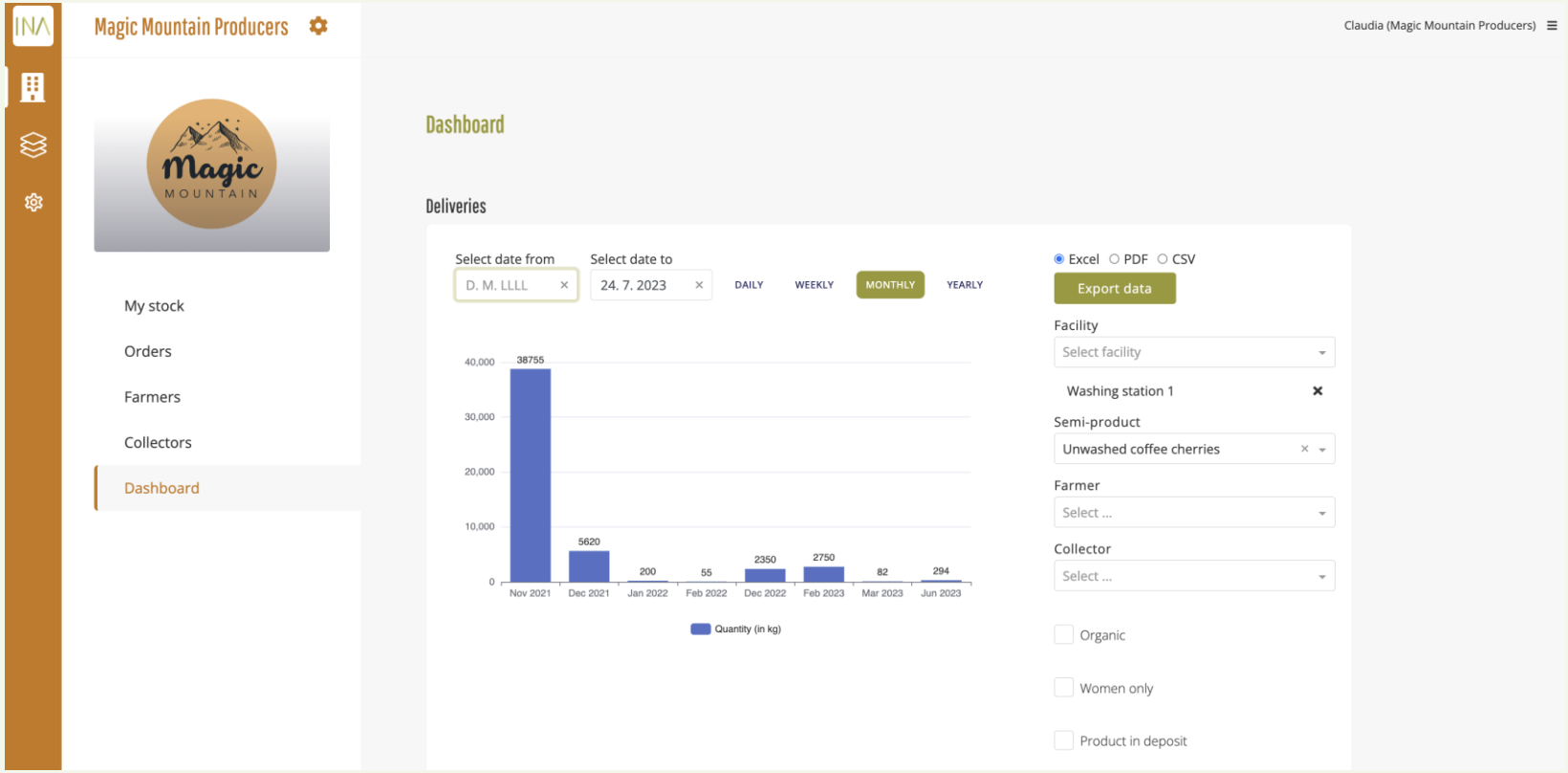
This module allows system users to view aggregated data previously entered into the system and export the data.

7.1 Deliveries dashboard

To access the dashboard of your company/organisation, click on the “Company” icon as shown on the screenshot below and select “Dashboard” from the submenu. You can also go directly to “Dashboard” tile as shown below.

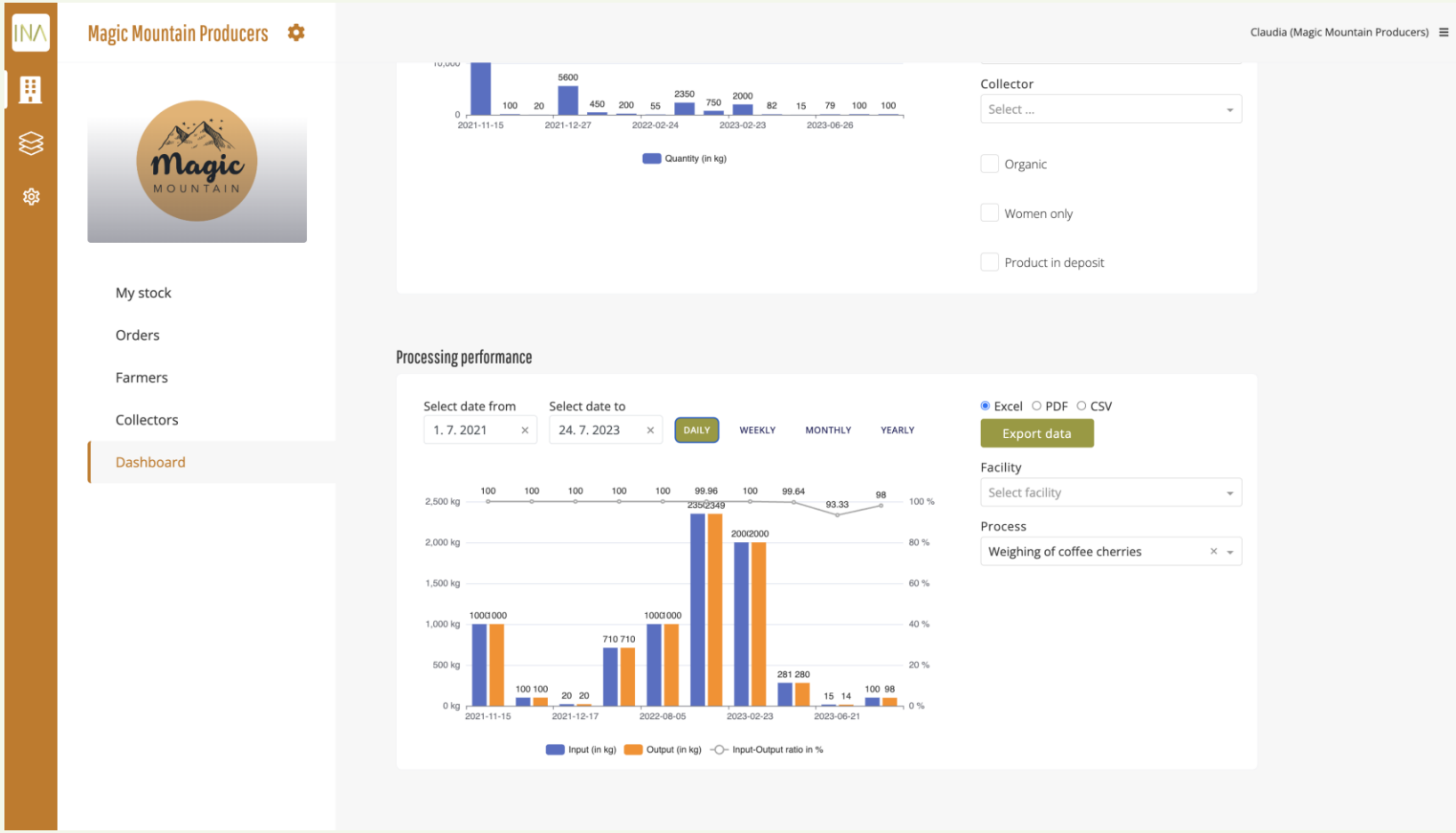


In the “Deliveries” dashboard, you can select a date range and switch to daily, weekly or yearly view. You will also be able to select one or several facilities, select a specific semi-product and even show data for a specific farmer or collector. By ticking the boxes below (e.g. organic) you can further filter the data to be aggregated by the system. Periods with zero data entries, will not show any bars. In order to export the data, select either Excel, PDF ord CSV format and click “Export data”. Note that for large time periods it will not be possible to display all bars, however all data will still be exported up to a maximum time range of 3 years.



7.2 Processing dashboard

To see the “Processing performance” dashboard, scroll down on the dashboard page. You can select a date range, switch to daily, weekly or yearly view. You need to select a facility and the corresponding process you would like to see the performance for. Periods with zero data entries, will not show any bars. In order to export the data, select either Excel, PDF ord CSV format and click “Export data”. Note that for large time periods it will not be possible to display all bars, however all data will still be exported up to a maximum time range of 3 years.



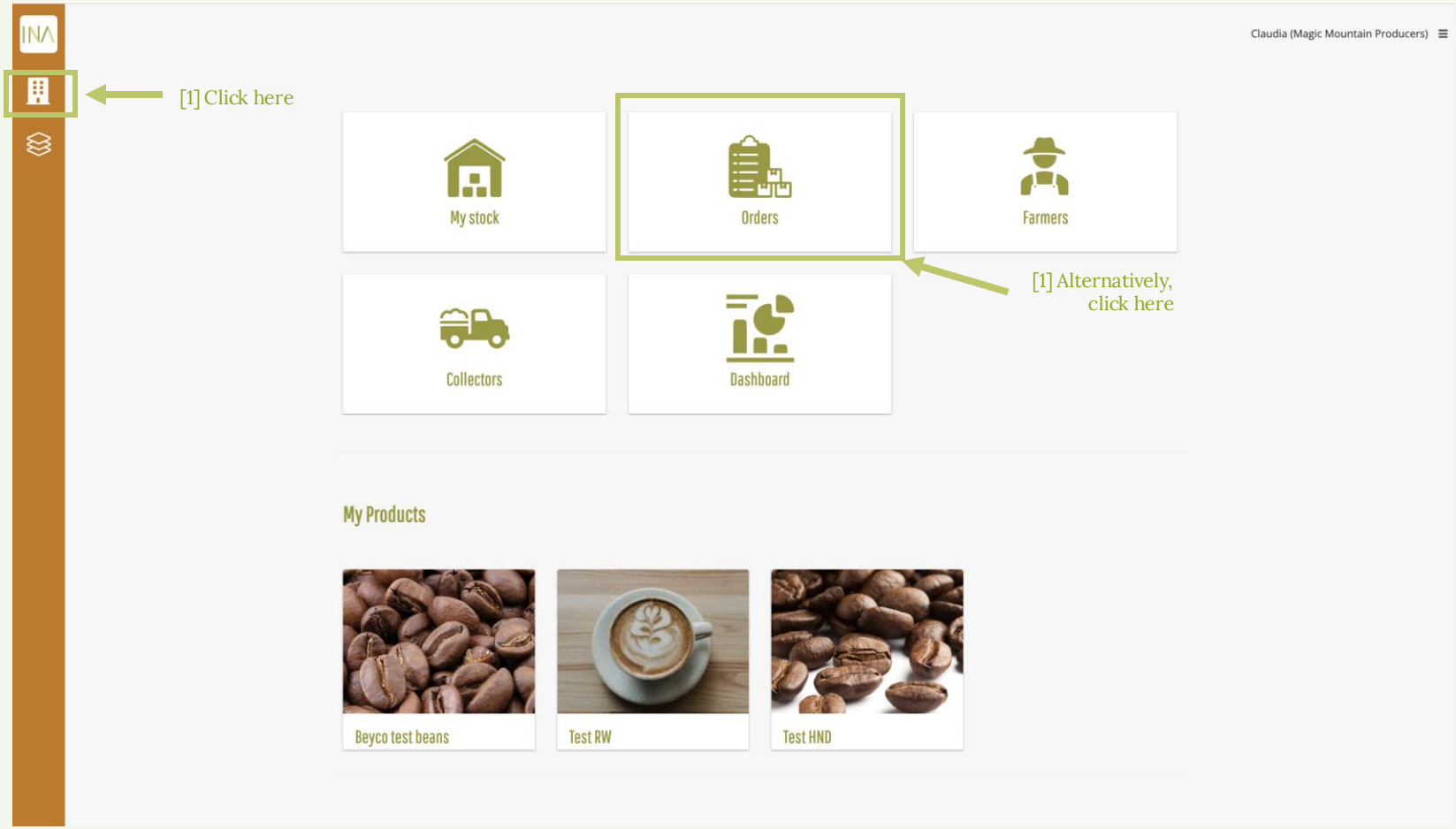
Chapter 8.

Orders

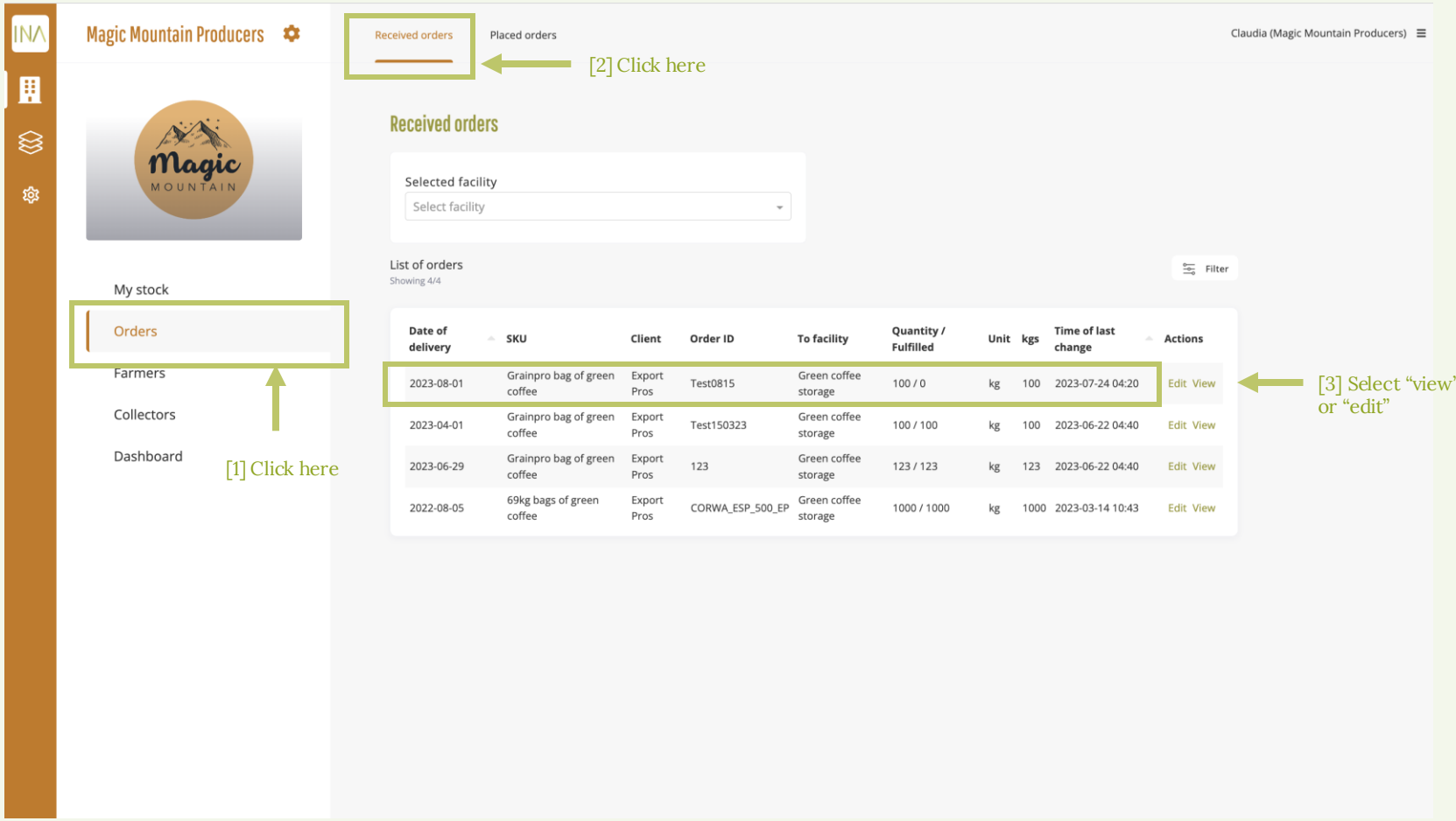
This module allows company users to receive and fulfil orders from their buyers.

8.1 View and fulfill an order

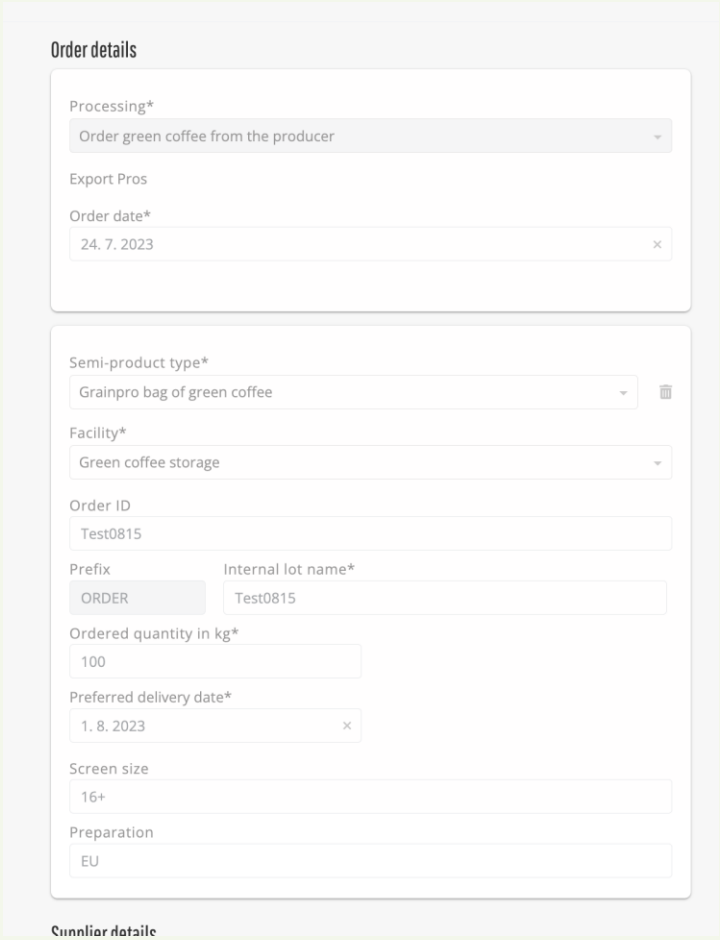
To access the orders section, click on the “Company” icon as shown on the screenshot below and select “Orders” from the submenu. You can also go directly to “Orders” tile as shown below.



Follow the steps below to view or edit an order. By clicking on “edit” you can allocate products from your stock to the order and thereby fulfill a buyer’s order.



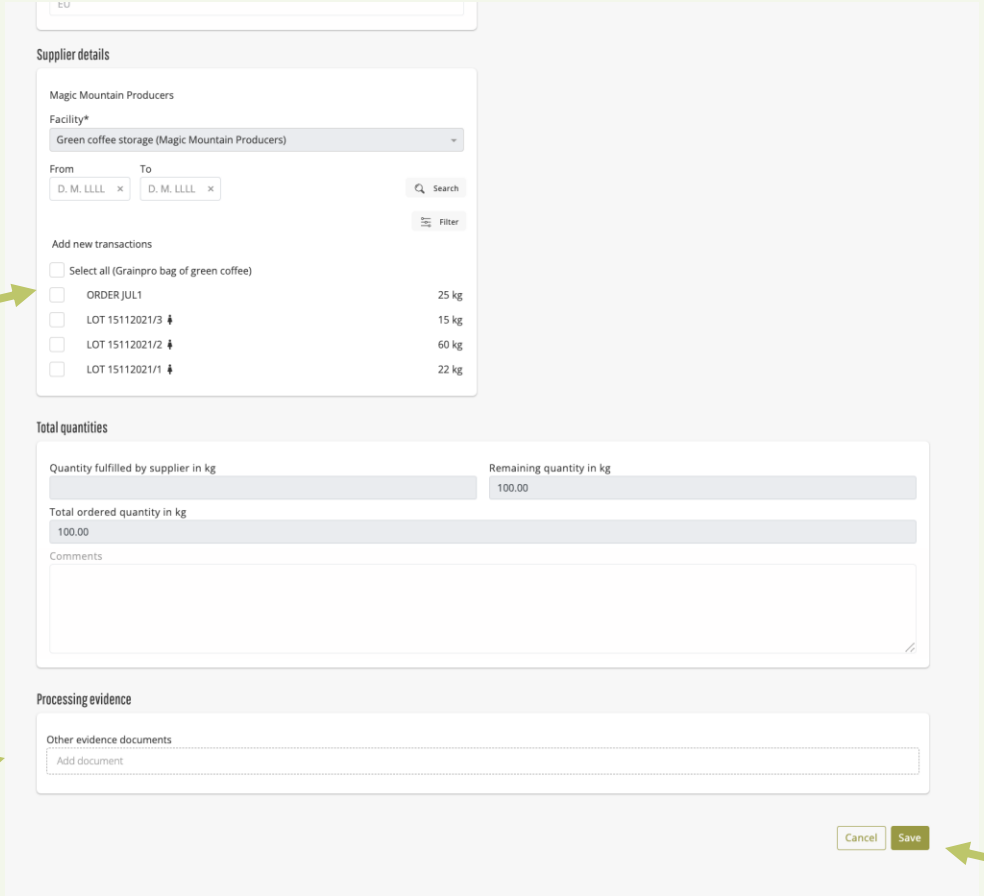
In the upper part of the order you see the the buyer's requirements in the "order details" section. Here, you cannot edit anything.



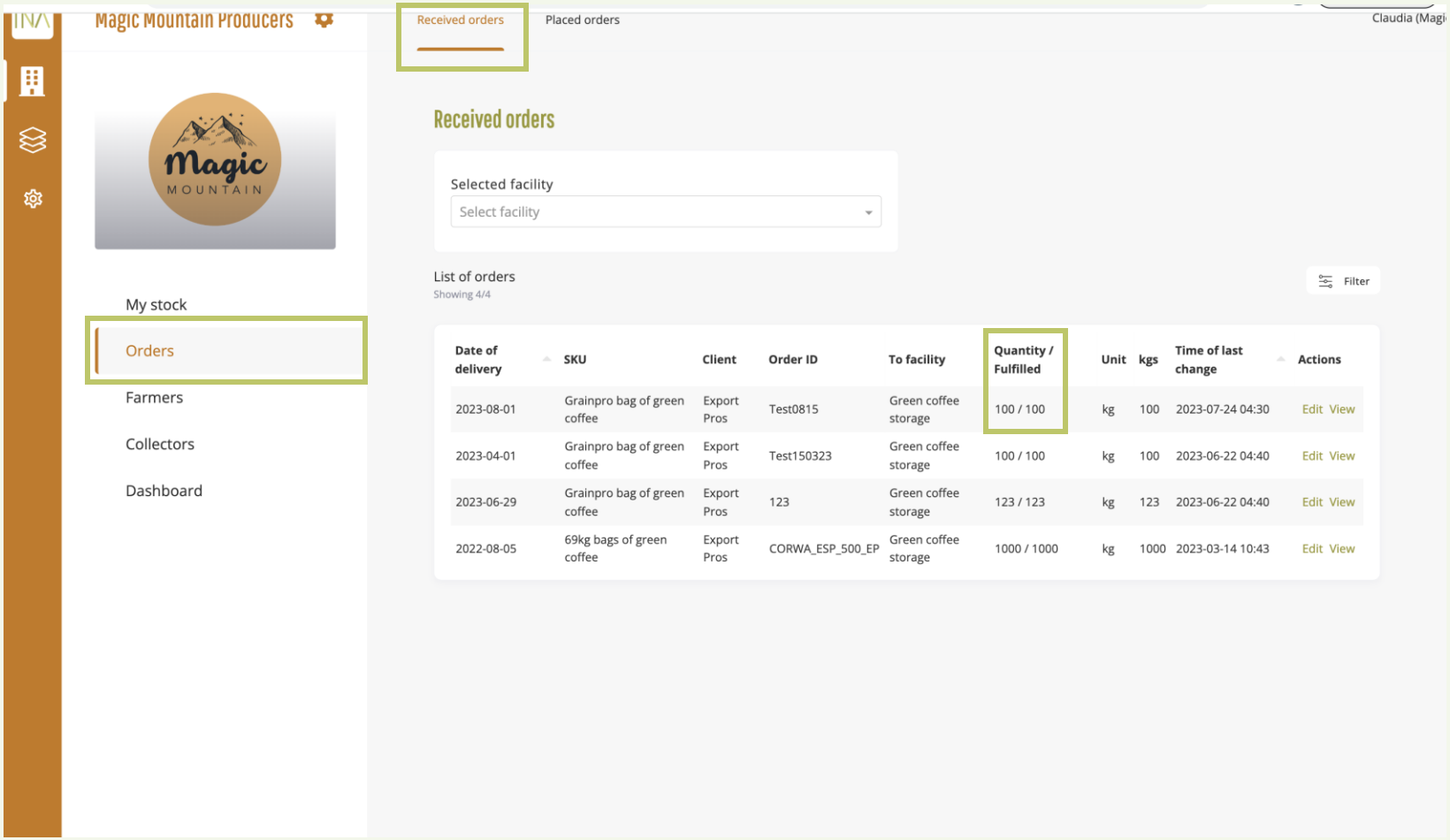
In the lower part of the order, select the batches you send to the buyer. Make sure the ”quantity fulfilled” matches the “Total ordered”. In case the added quantity surpasses the ordered quantity, the system will clip the last item added. You may also add evidence documents before you save the order.

Add one or several items

Add evidence documents as requested by the buyer

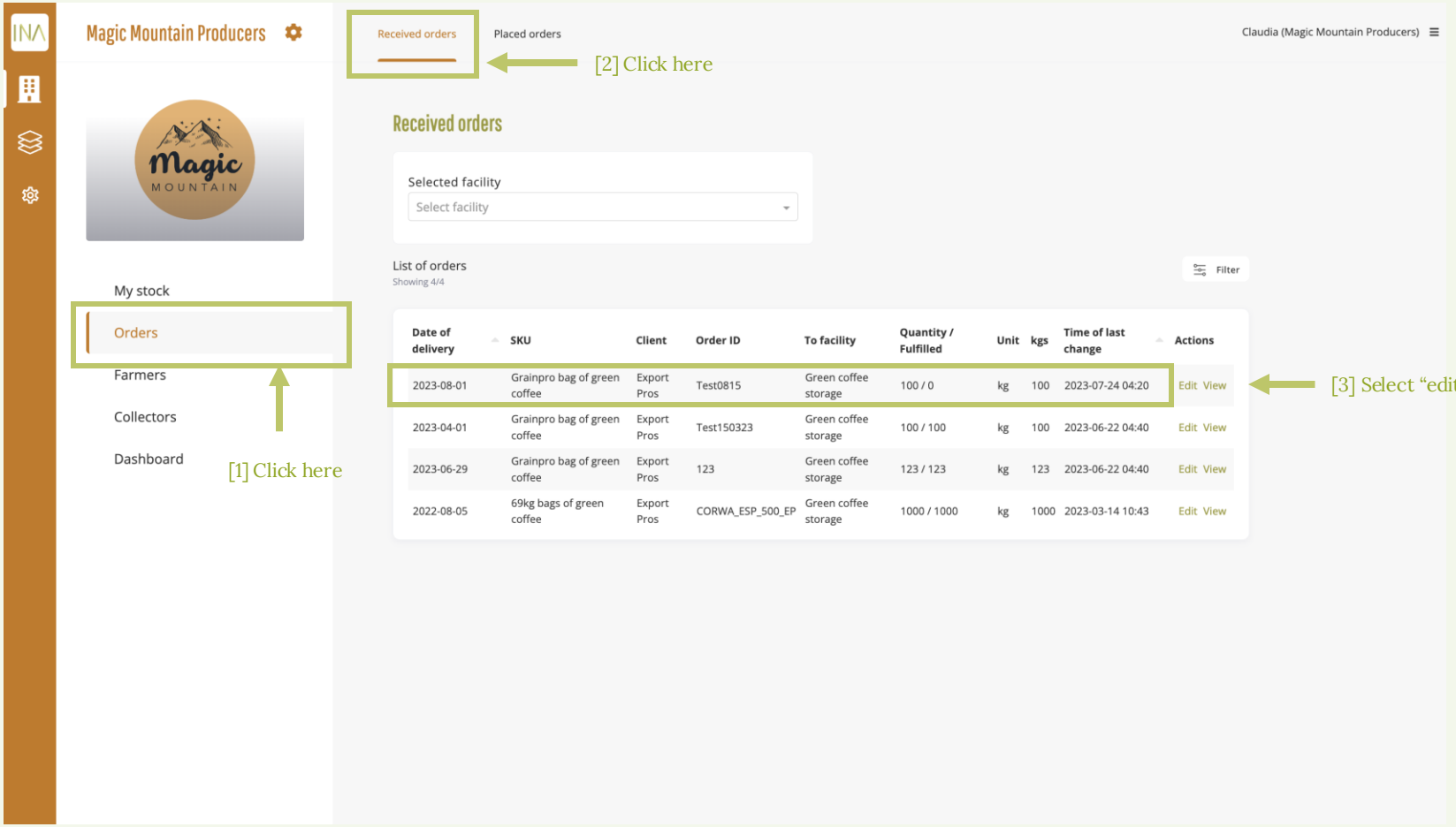


After saving the order, you can verify the fulfilled quantity in the list of orders.

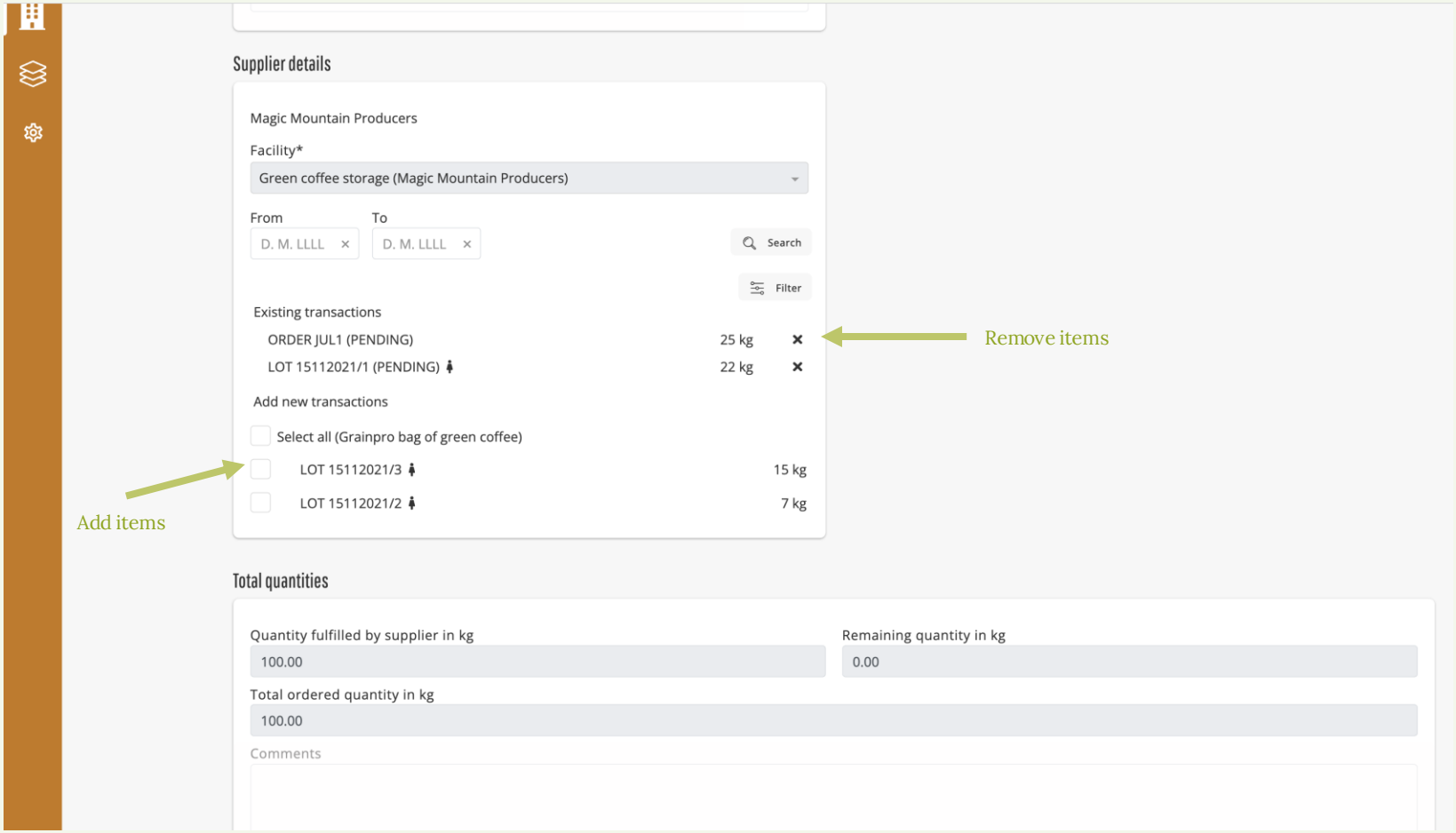


8.2 Edit an order

You also have the possibility to edit the items you allocated to a buyer's order by clicking again on "edit" in the "received orders" part of the system.



You can remove items from an order by clicking on the “x” in the “existing transactions” part. You can add new items by ticking the boxes in the “Add new transactions” part. Click save after checking everything is correct and the total ordered matches the quantity fulfilled. Note that you cannot edit an order anymore once the buyer has approved your added batches.

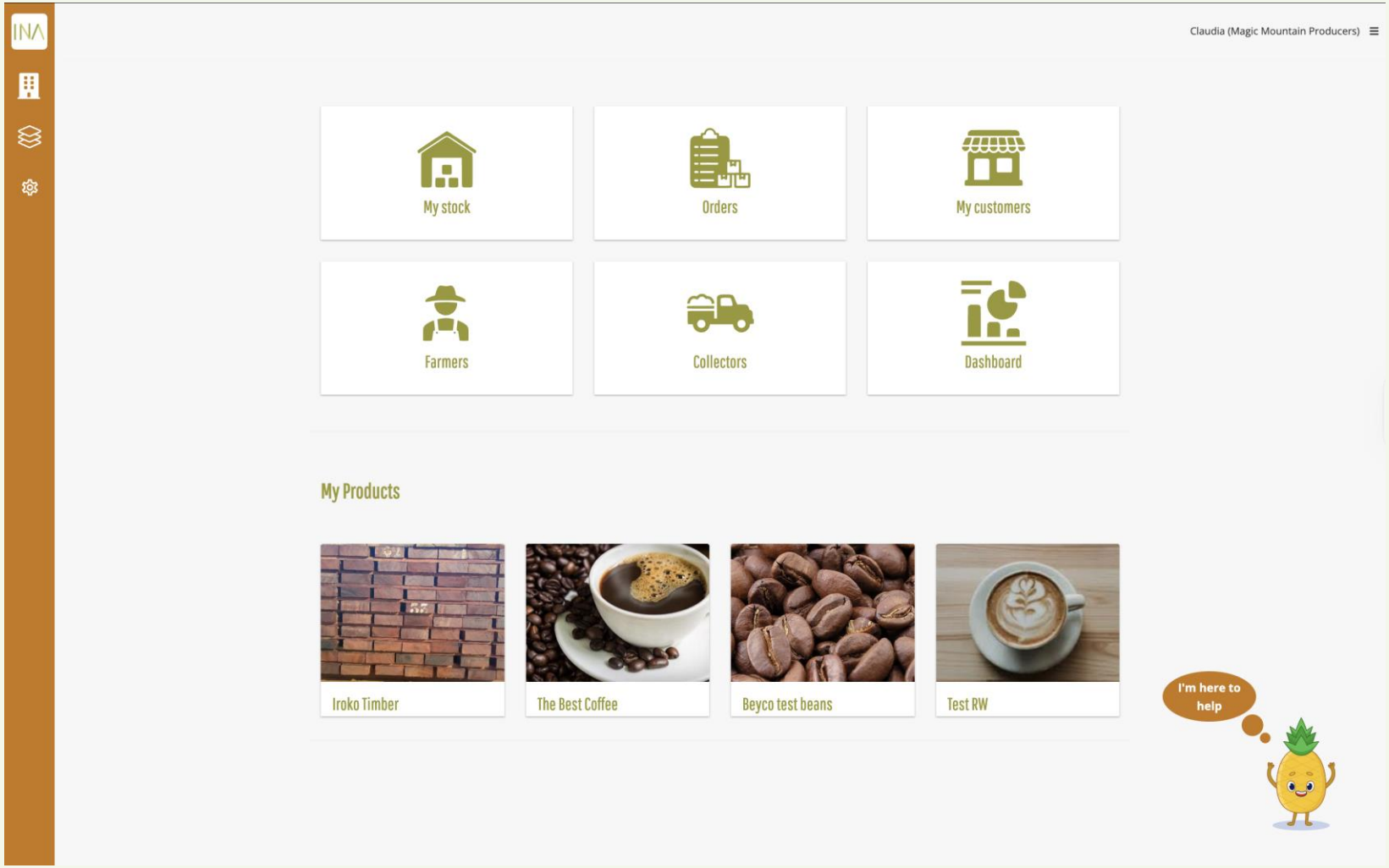


Chapter 9.

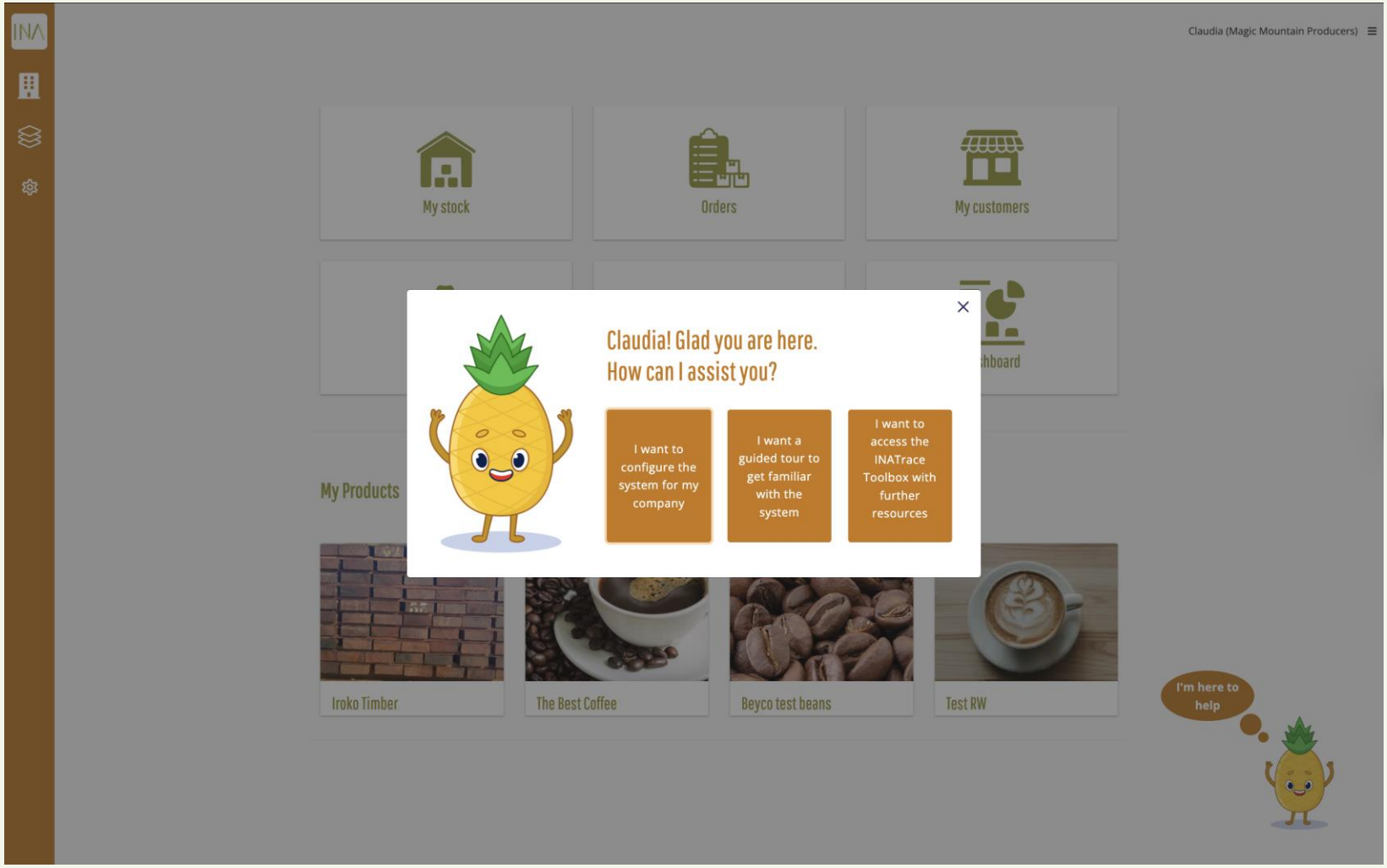
Company configuration (ADMIN ONLY)

This module guides company admins to change configurations of their company.

If you are just getting started with INATrace and need to set up the configuration for your company, make sure that you have “company admin” rights to start with. To find out where you find all parts of the company configuration and add first configurations, you can click on Mr. Pineapple in the lower right corner of the user interface.

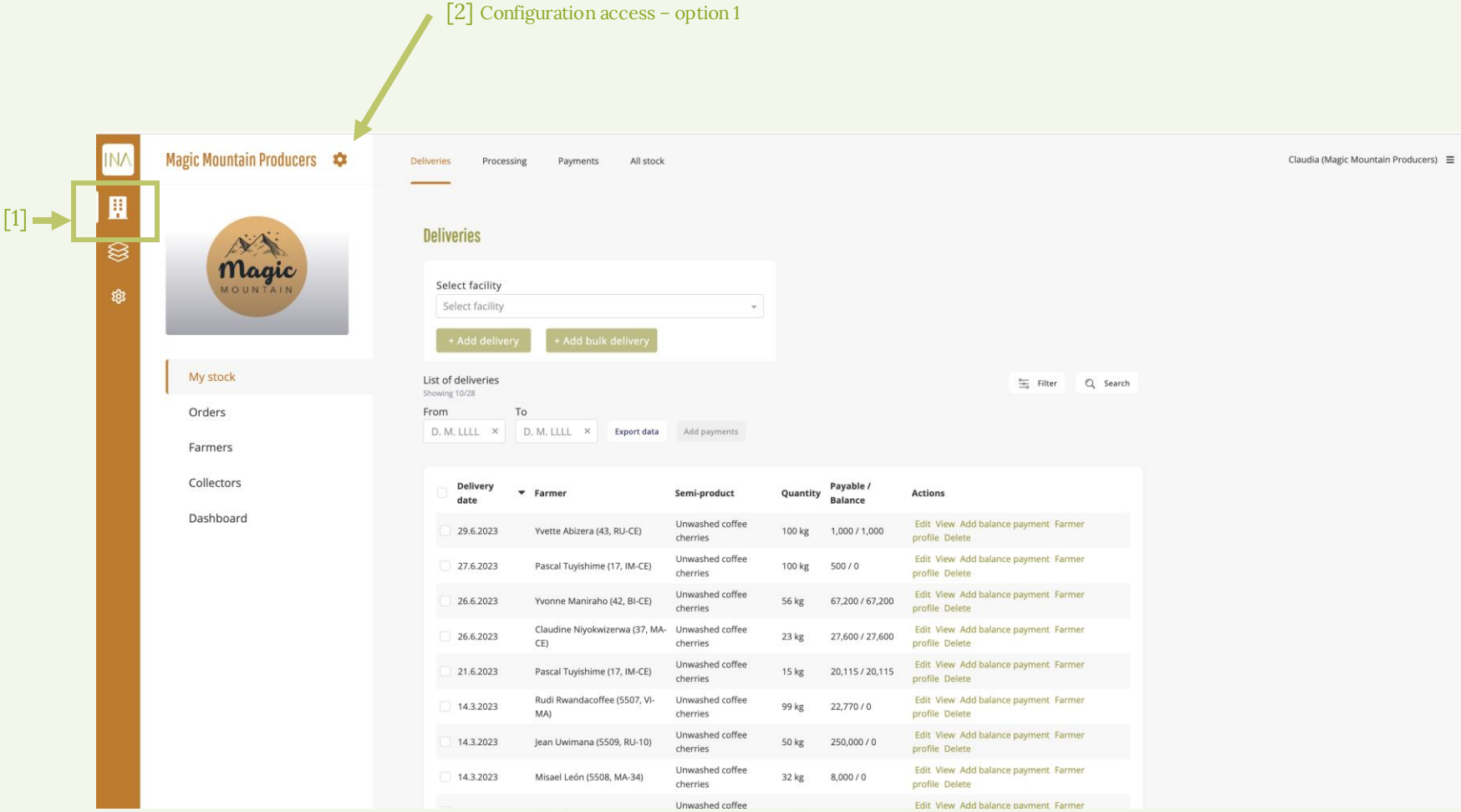


Next: Click on “I want to configure the system for my company” and start completing the checklist. Alternatively, you can also start with a guided tour through the system to get familiar with the functionalities or access additional user manuals and admin guides.

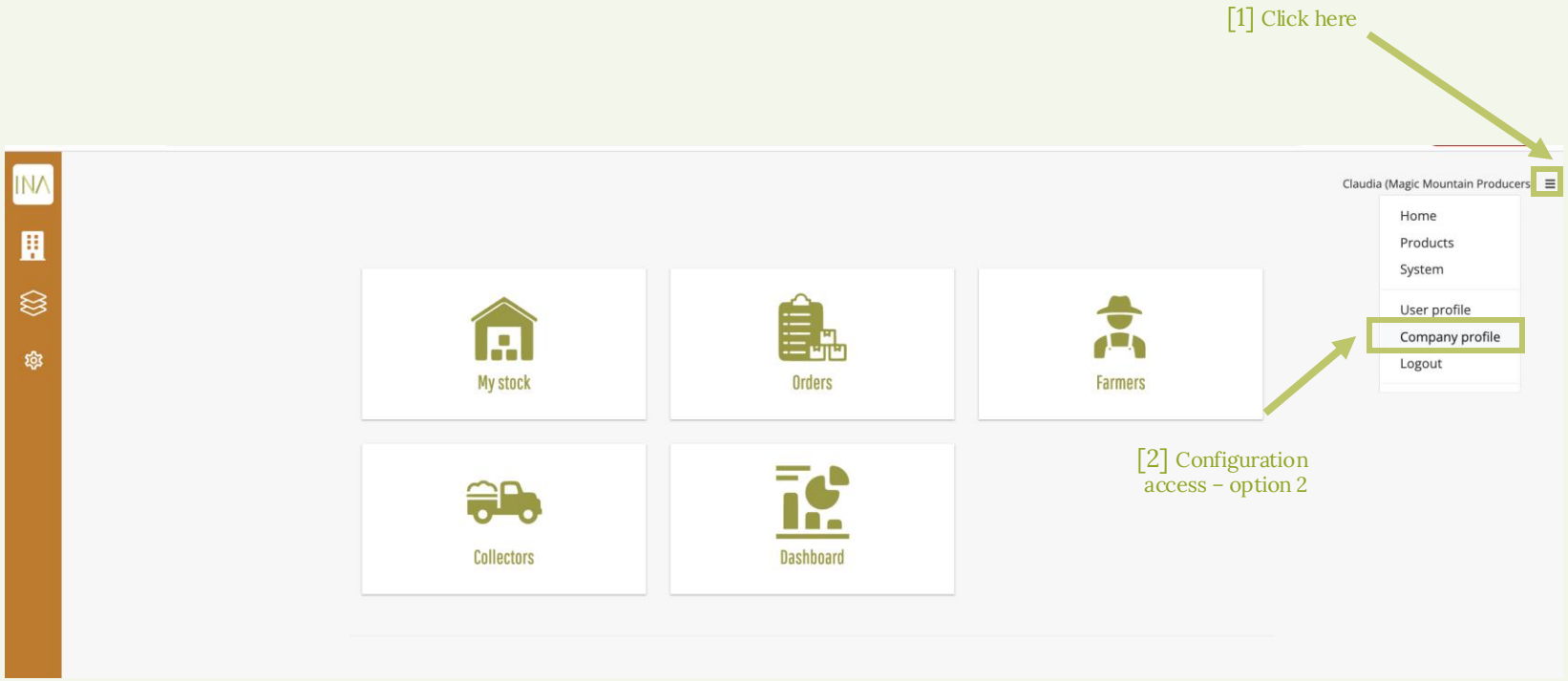


9.1 Accessing your company profile - Option 1

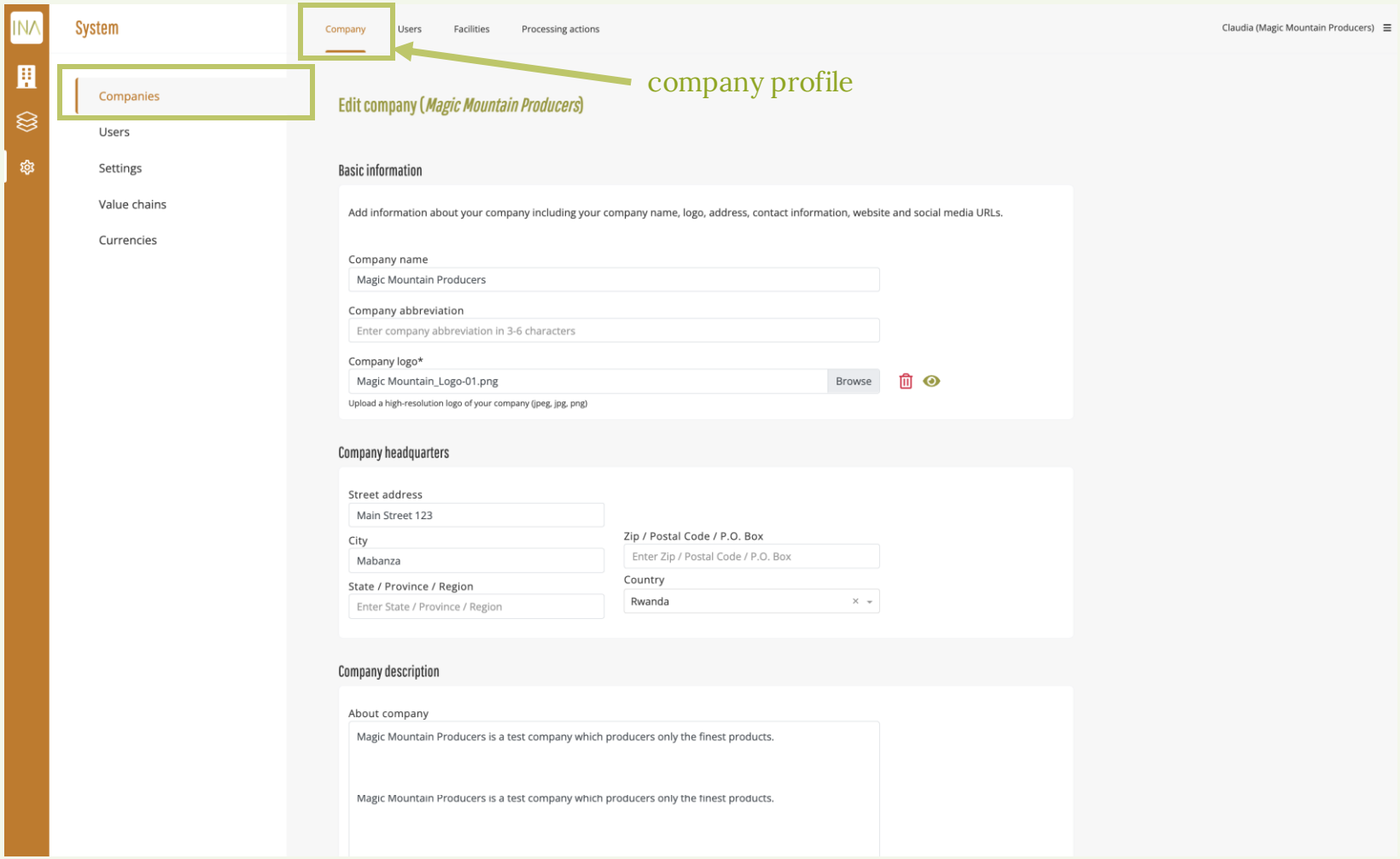
To access the company profile of your company/organisation, click on the “Company” icon as shown on the screenshot below the company profile icon which allows you to have configuration access.

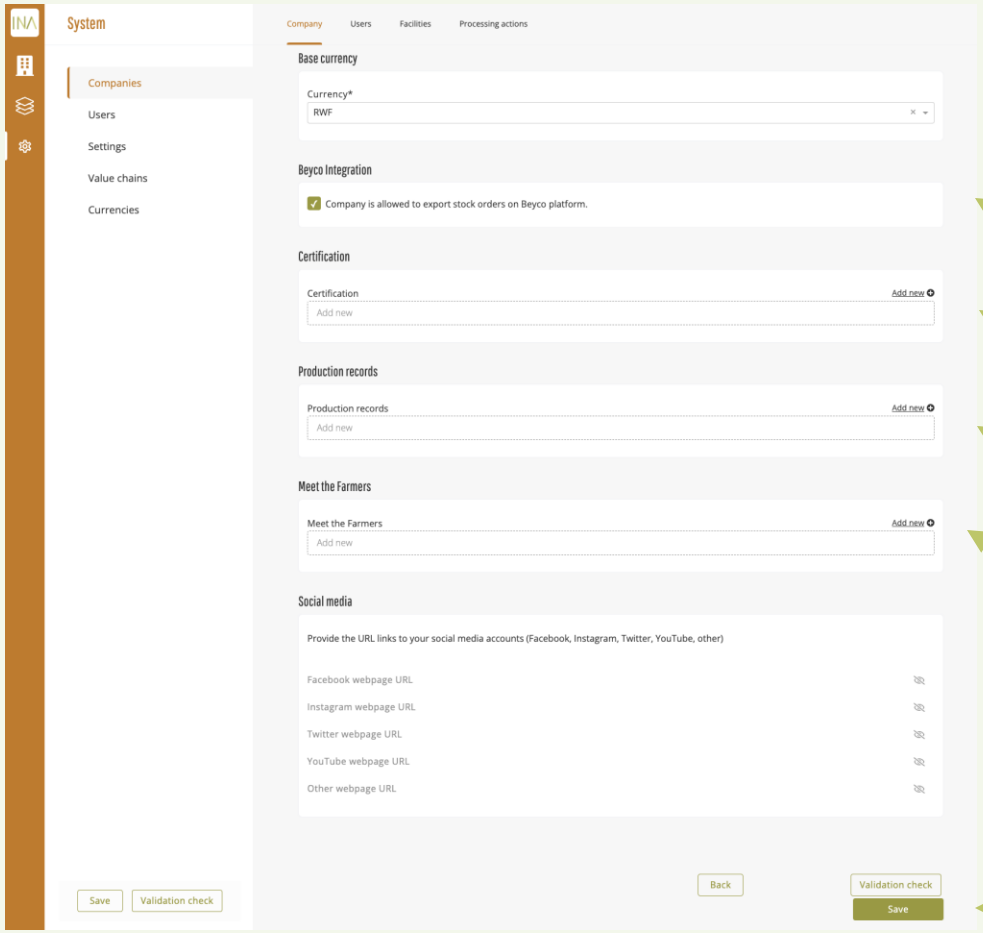


9.1 Accessing your company profile - Option 2



9.2 Edit Company information





Currency to purchase your input products

Activate integration to Beyco coffee sales platform for your company

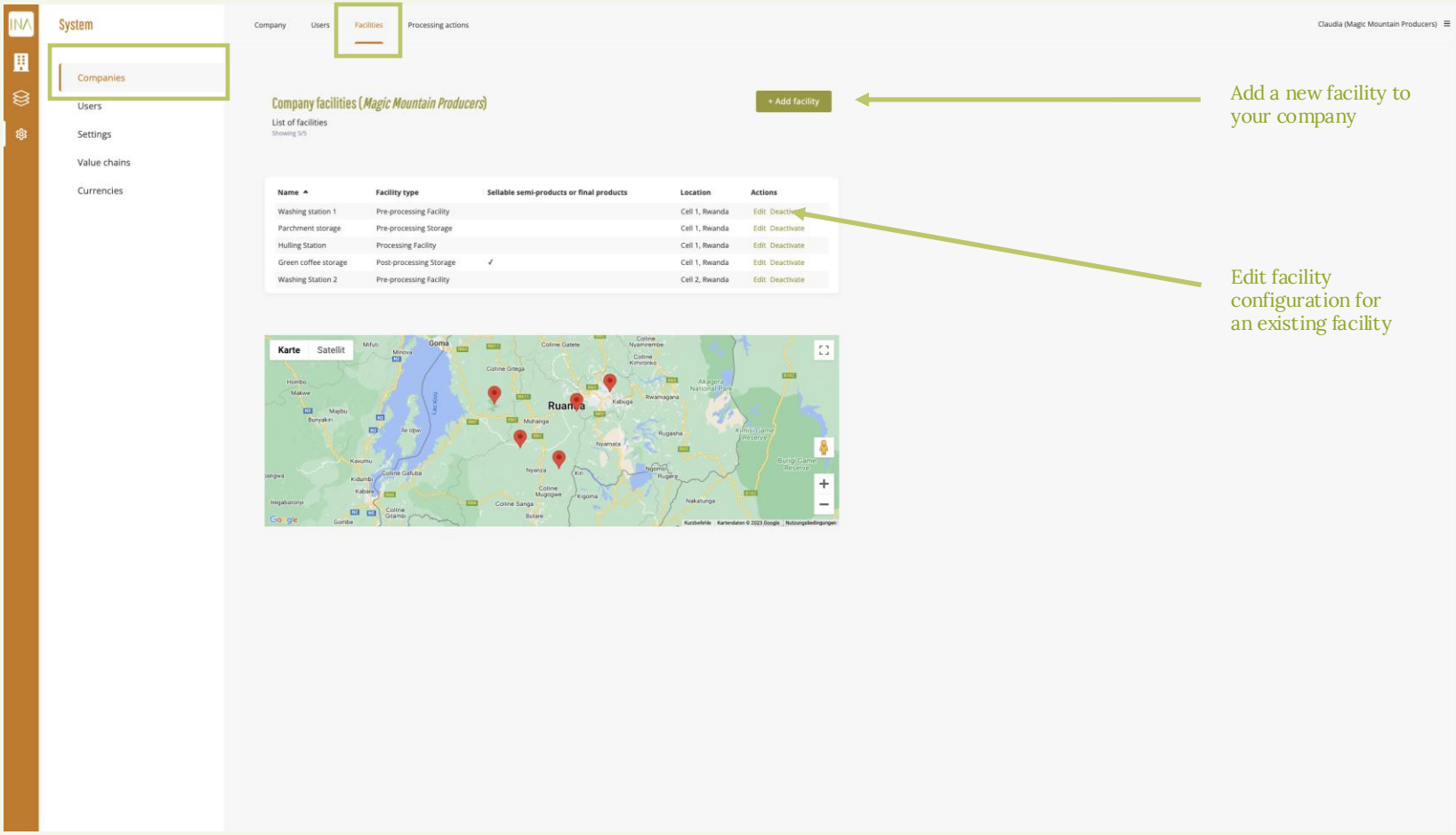
Upload organic certificate / Fairtrade etc.

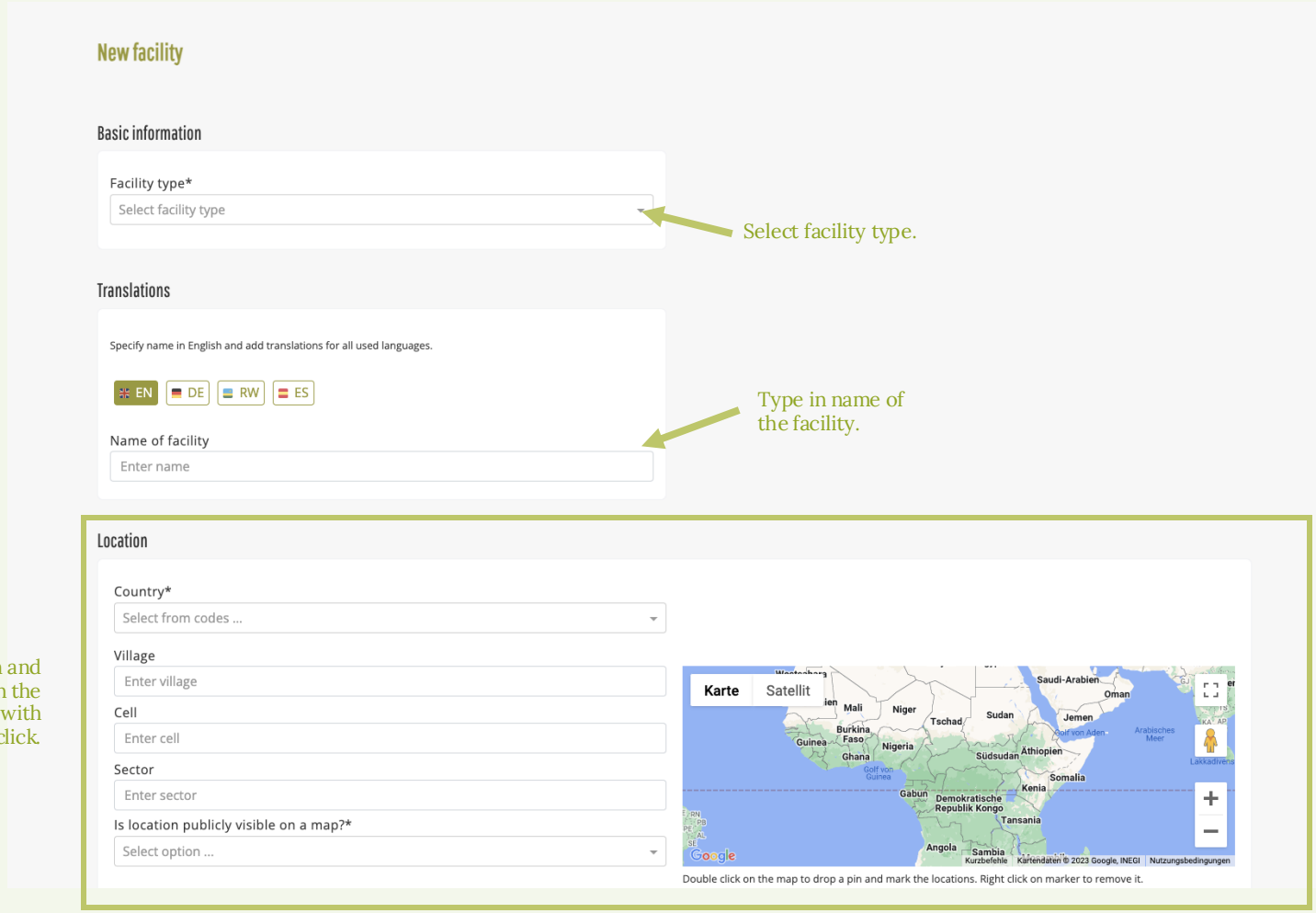
Upload photos of production processes.

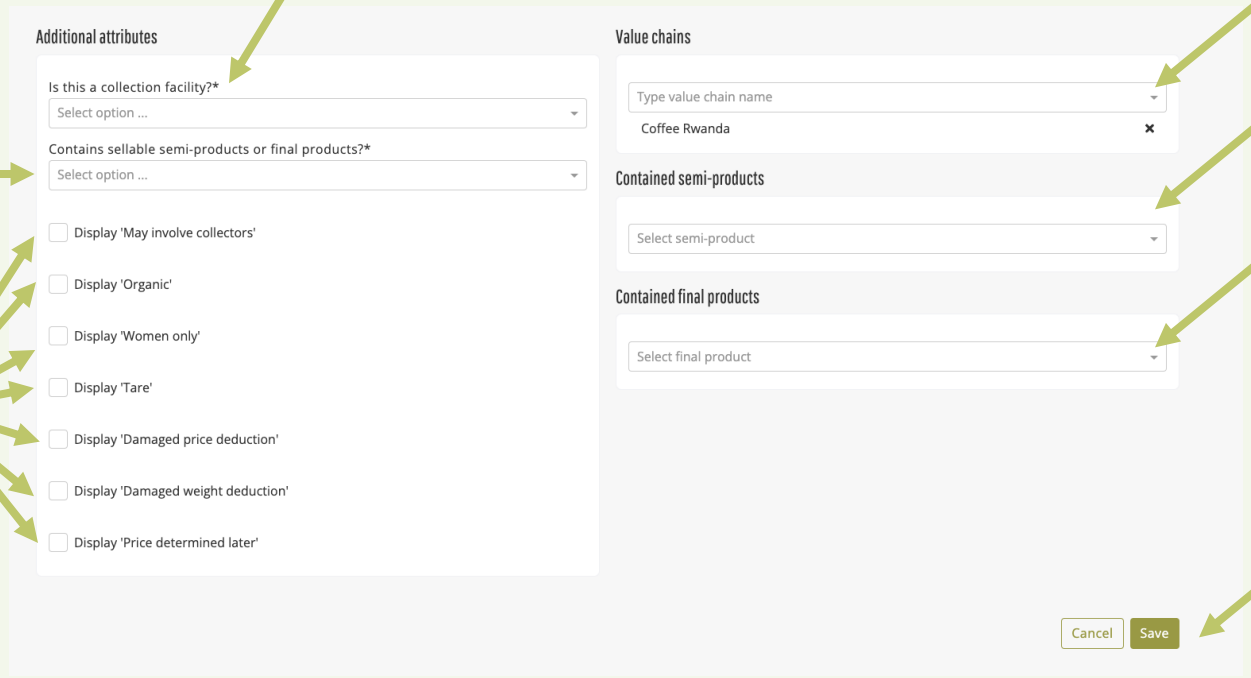
Upload photos of farmers and quotes.

To validate your inputs, click on save.

9.3 Add/Edit company facility

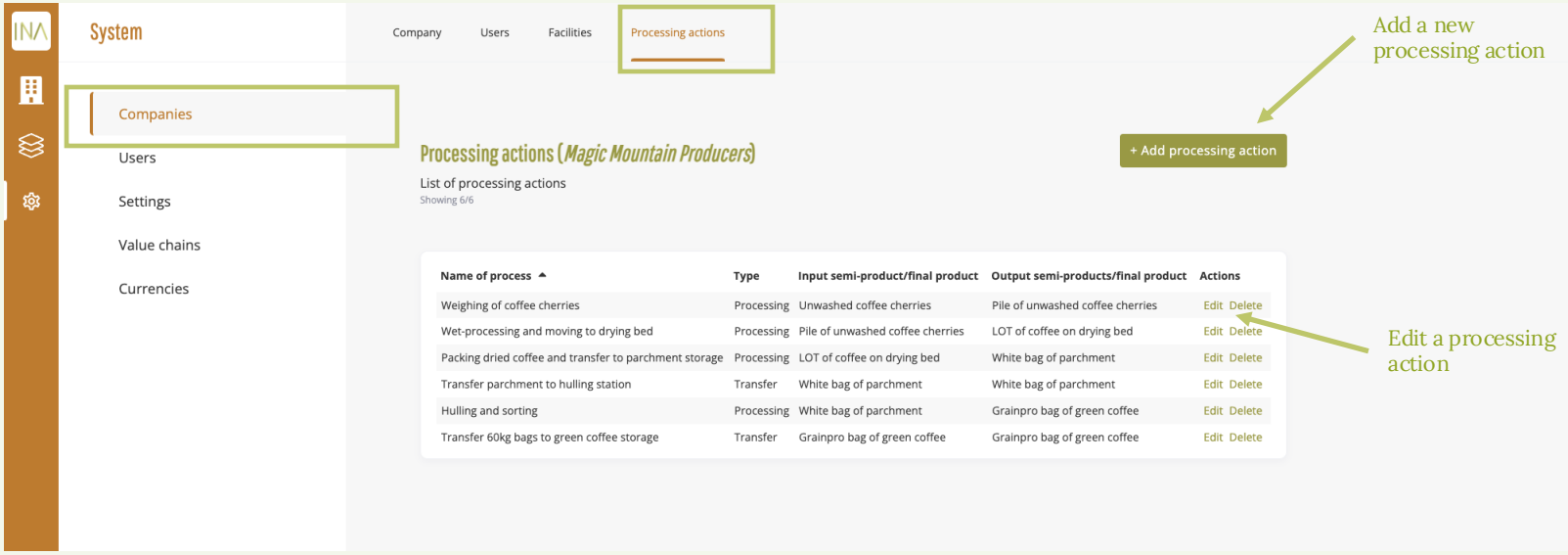


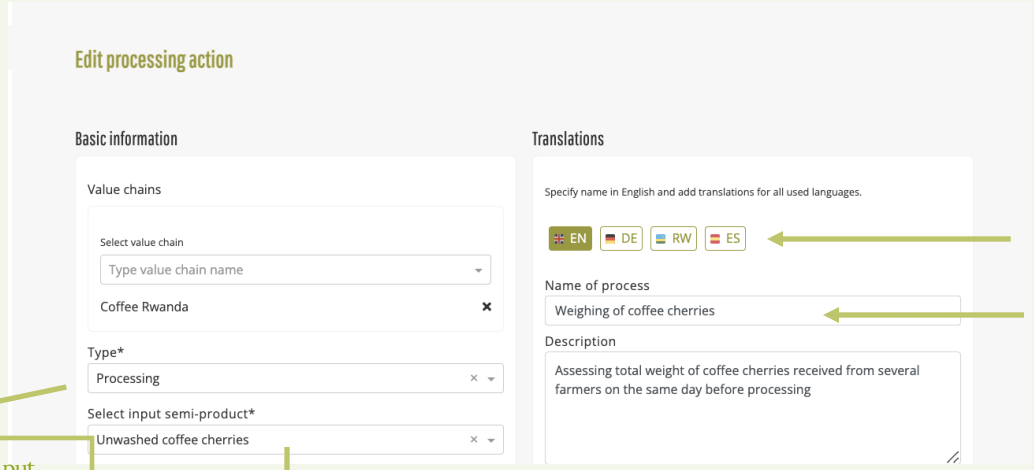

New facility
Basic information
Facility type*
Select facility type
Select facility type.
Translations
Specify name in English and add translations for all used languages.
EN
DE
RW
ES
Type in name of the facility.
Name of facility
Enter name
Location
Country*
Select from codes ...
Village
Enter village
Cell
Enter cell
Sector
Enter sector
Is location publicly visible on a map?*
Select option ...
Fill location and put pin on the map with double click.
Karte
Satellit
Double click on the map to drop a pin and mark the locations. Right click on marker to remove it.



BE VERY CAREFUL WITH ALL CHANGES IN THE CONFIGURATION. ASK FOR HELP IF YOU ARE NOT SURE.

9.4 Add/Edit processing actions





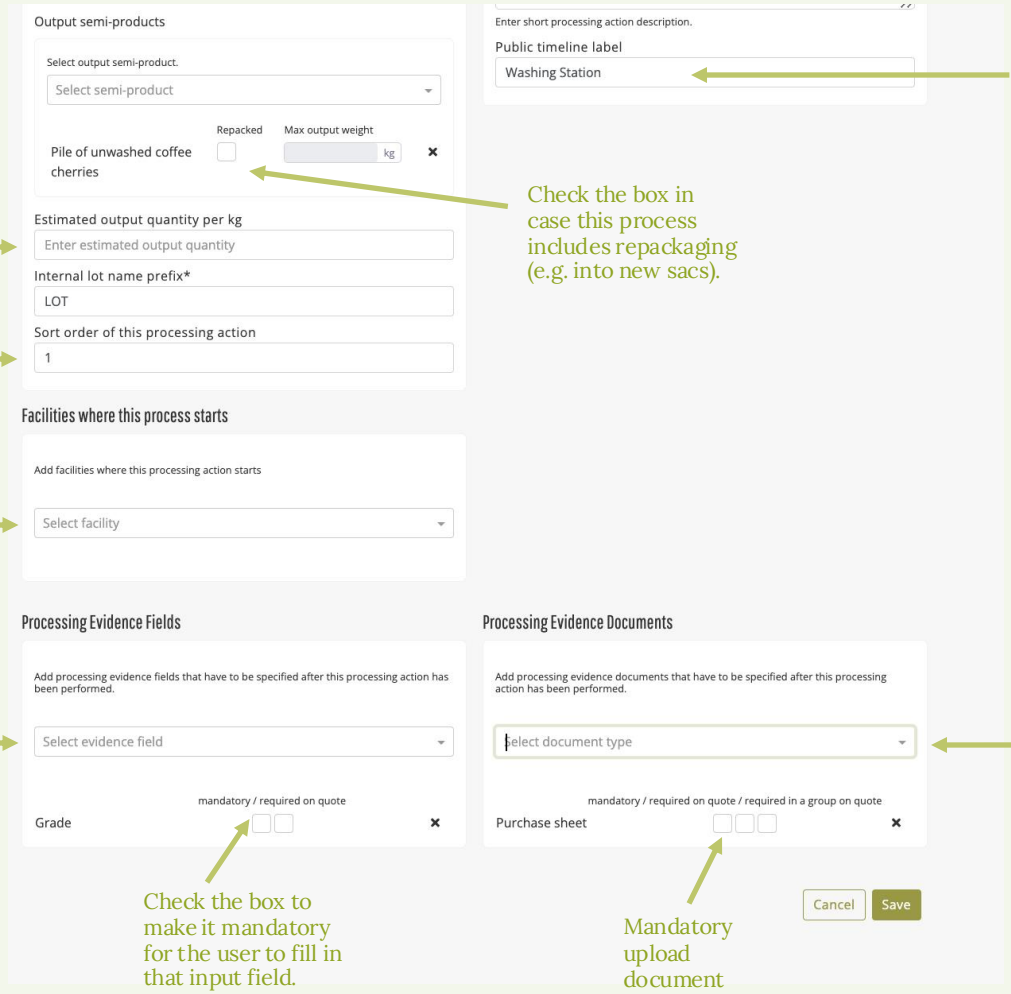
Translation of the process name to other languages (e.g. buyer's language). **English is mandatory**

Enter name of process in selected language

- Type "**Processing**": input semi-product is different from output semi-product
- Type "**Transfer**": input semi-product is the same as output semi-product. No processing, only transport to another facility

Input semi-product of this process (semi-product = unprocessed or semi-processed product)

BE VERY CAREFUL WITH ALL CHANGES IN THE CONFIGURATION. ASK FOR HELP IF YOU ARE NOT SURE.



Optionally: Define estimated output. User will get a warning if entered amount is outside expected range

Optionally: Define order in which system shall sort processes in the user interface

Optionally: Define facilities. This process will only show under those facilities in the user interface

Select additional input fields for further processing. Those will appear in the processing interface

Check the box in case this process includes repackaging (e.g. into new sacs).

Public timeline label (for product journey of QR Code information) needs to be in the language of the end customer of the final product.
DO NOT CHANGE!

Select documents that the user must upload for that process.

Check the box to make it mandatory for the user to fill in that input field.

Mandatory upload document

BE VERY CAREFUL WITH ALL CHANGES IN THE CONFIGURATION. ASK FOR HELP IF YOU ARE NOT SURE.

SASI Sustainable Agricultural Supply Chains Initiative

SASI – Sustainable Agricultural Supply Chains Initiative by

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

On behalf of

Federal Ministry for Economic Cooperation and Development